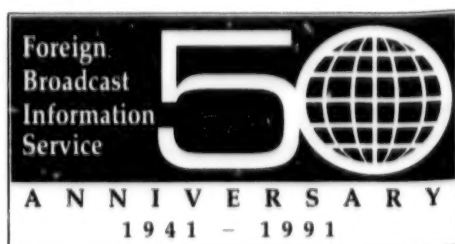


JPRS-TEP-91-011  
28 MAY 1991



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# ***JPRS Report***

# **Epidemiology**

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# Epidemiology

JPRS-TEP-91-011

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[Recent materials on AIDS is being published separately in a later issue.]

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## REGIONAL AFFAIRS

### Unicef Tackles Measles Elimination, AIDS Education

FL1204185591 Bridgetown CANA in English  
1536 GMT 12 Apr 91

[Text] Bridgetown, Barbados, April 12, CANA—Measles and the killer Acquired Immune Deficiency Syndrome (AIDS) top the list of problems being tackled by the United Nations Children's Fund (Unicef) Caribbean area office.

"Our intention (is) to continue assistance towards achievement of the Caribbean goal for elimination of measles by 1995," area representative Dr. Jane Haile told a strategy meeting here early in April. "Similarly, we should seriously consider addressing under MIP (Multi-Island Programme) a new and major as to child survival [as received] the problem AIDS," Haile told a delegate to the region and to a Unicef official.

Early childhood development programmes on child abuse, advocacy for [passage garbled] rights of the child, income-generating activities for mothers, and a programme seeking to prevent teenage pregnancy are also among Unicef's plans as outlined by Haile.

But the measles project is the immediate concern of the organisation, working with other international agencies such as the Pan-American Health Organisation (PAHO). Haile described it as "a massive task, given the need to vaccinate all persons of 12 months to 15 years old in the initial phase of the campaign."

As a first step toward the eradication of measles from the English-speaking Caribbean by 1995, PAHO plans to hold Measles Elimination Month in May. To ensure the success of this effort, national and regional information campaigns will be conducted to reach parents and adolescents, and convince them to have everyone between nine months and 15 years old immunised despite their previous vaccination status or previous history of measles.

The managers of the campaign stress the key strategy for interrupting measles transmission in all countries is the elimination of all susceptibles under 15 years, simultaneously. If successful, the campaign will make the Caribbean the first area in the world to become measles-free by 1995.

Although immunization coverage is very good in the English speaking Caribbean, measles is still a problem, with outbreaks in 1990 causing more than 4,000 cases. Of all the preventable diseases, measles is still the biggest killer. So special efforts will be made to interest and involve the Caribbean's newspapers, magazines, and television and radio stations in the measles elimination campaign, both to inform the local population and to achieve multiplier effect in information dissemination.

To the widest extent possible, local organisations and community groups will assist in these efforts, Unicef officials say. Unicef has targeted adolescents with a small

pocket comic book to help convince them to get immunised and to help mobilise their friends, even if they have already received the measles vaccine. The comic book will be backed up with posters and radio and TV announcements.

PAHO and the Caribbean Epidemiology Centre (Carec) are involved in focus groups and workshops to help motivate health staff in the campaign. The Academy for Educational Development (AED) is organising a TV special to try and bring awareness of the campaign to as wide a cross-section of the population as possible.

Unicef is also seeking to set aside popular myths about measles. Many people say "measles is nothing. It comes and it goes. The truth is measles comes and can take your child with it. Forever," the organisation explains in its latest quarterly publication, *CHILDREN IN FOCUS*. If your child gets measles, they could lose their eyesight. Measles...could take your child to the hospital with pneumonia, heart disease, or even brain damage."

To those who say, "my child has already had measles. He doesn't need another shot," Unicef counters: "Many diseases look like measles. You can never be sure." A second measles shot if the child has already had one can only reinforce and boost its immunity, and there is no danger of side effects.

Most of Unicef's AIDS-related activities so far have been conducted in Barbados and Trinidad, Haile said; but that is about to change.

"This year, on the basis of that experience, we are beginning work in the Eastern Caribbean, with...assistance from the island of Jersey through the UK Committee," she explained. "This work should perhaps continue in expanded form focusing particularly on reaching women and teenagers of both sexes through non-formal media: radio, community theatre, and other performing artists and our comic cartoons."

## ANGOLA

### Reportage on Outbreak of Cholera

#### Twenty Dead in Various Provinces

MB2404074191 Luanda Domestic Service in Portuguese  
1900 GMT 23 Apr 91

[Text] Julio Leite, national director of public health, has said in Luanda that more than 20 people died of cholera in Angola in the past two months. He said the outbreak, which affects mainly the Luanda, Cuanza Norte, Bengo, Cuanza Sul, Huila, Benguela, and Huila provinces, has been caused by poor hygienic conditions and torrential rains.

Julio Leite added that three hospital wards to cater for adults suffering from cholera are currently being built in Luanda. At present there is a ward with 80 beds for children suffering from the disease.

### Sixty-seven Deaths in Cuanza Norte

MB2604084791 Luanda Domestic Service in Portuguese  
1900 GMT 25 Apr 91

[Excerpt] Health sources disclosed in Ndalatando city today that cholera killed 67 people in Cuanza Norte Province last year.

However, those sources noted that that figure does not include cases that were not brought to the hospitals and added that the health authorities only managed to control the spread of the epidemic in four of Cuanza Norte Province's 10 districts. [passage omitted]

### Twelve Dead in Luanda City in April

MB2904210391 Luanda Domestic Service in Portuguese  
1200 GMT 29 Apr 91

[Excerpt] Dr. Braz Ferreira, director of the national program to combat cholera, disclosed today that there has been an increase in the outbreak of cholera in Luanda city since the beginning of this month. Dr. Braz Ferreira told Luanda radio that the causes of the disease are contaminated water and poor hygiene in the city. Since the beginning of April, 432 cholera patients were admitted to Josina Machel Hospital. Twelve of them have died of the disease. [passage omitted]

## BENIN

### Cholera Epidemic Breaks Out, Killing One

AB2904181491 Cotonou Domestic Service in French  
1930 GMT 24 Apr 91

Report by Tiakonou of the BENINESE NEWS AGENCY—recorded

[Excerpt] [passage omitted] It has been a week now since a cholera epidemic broke out in all the villages along Lake Aheme [in Bopa Subprefecture in Mono Province]. Only four cases were declared on 19 April, but as of today, 24 April, there are eight. Of these eight, one person has died, according to statistics from the health center. We hope the increasing epidemic will be arrested quickly to eliminate this plague.

According to the chief medical officer in Bopa, Dr. Kalim Kounde, the situation can be and has already been brought under control. The only difficulty for the moment, according to Dr. Kounde, is the insufficient supply of pharmaceuticals. In this connection, the Mono prefecture and departmental directorate of health have been informed, and so the lives of Bopa's people are in their hands.

## GHANA

### Cholera Claims Six Lives, 550 Treated in Wassa-West

AB1004103491 Accra Domestic Service in English  
2000 GMT 9 Apr 91

[Text] Five Hundred and fifty people have been treated for suspected cholera which has claimed six lives since its

outbreak in the Wassa-West District between January and March. The senior medical officer in charge of Tarkwa General Hospital, Dr. Teddy Aboekli, told the GHANA NEWS AGENCY that the affected areas are Esuaso, Mbaem, near Prestea, Dompim, Mpepesa, and Oppong Valley. He said health workers have been touring the villages in the district to educate the communities on the need to observe personal hygiene and environmental cleanliness.

## MADAGASCAR

### Hospital Situation Reportedly in Crisis

91WE0305A Antananarivo MADAGASCAR TRIBUNE  
in French 6 Mar 91 p 3

[Text] In all of the hospitals the schedule of operations or other surgical treatments is generally determined in advance except, obviously, for emergencies.

Now it happens that at present this kind of "timing" has seriously upset Ravoahangy Hospital in Ampefiloha due to the equipment and supplies problem. This was reported on 5 March at the Ministry of Health. It is highly likely that the other hospital centers in the capital—and why not everywhere else in Madagascar?—are also affected by this problem.

In fact for some time surgical sutures and serums have been in short supply, particularly at Joseph Ravoahangy Andrianavalona Hospital [HJRA]. As a result, the schedule of surgical operations has had to be changed repeatedly. The last reserve supply of the hospital has been completely used up, due to the numerous operations, which have had to be performed. Furthermore, the hospital vacuum pumps have suffered from serious breakdowns. These pumps are essential items of equipment for surgical operations.

To deal with the situation, the Ministry of Health had to take the necessary action.

For example, a shipment of surgical sutures is expected to arrive at any time. It should be noted in this connection that the most recent shipment, which was received on 7 February, did not last very long.

Regarding the vacuum pumps, a temporary solution has been found, which may also deal with the problem permanently. The pumps installed in the new buildings of Bafelatanana Hospital and those in the new hospital at Toamasina were moved and reinstalled in HJRA, where they are already functioning. We might note that the new hospital buildings mentioned above are not yet in operation. That is why it was decided to move these pumps, while waiting for the next shipment of imported pumps, which will be consigned to these new hospitals.

Regarding serums, we have been informed that the laboratory of the Central Pharmacy in Antananarivo, which produces the serums needed for supplying the hospitals in the capital, had to give "first aid" to the hospitals of Fianarantsoa and Mahajanga. Eventually, it is planned to reequip the Central Laboratory of



Antananarivo, because the need for serums is steadily growing. A loan of 194 million Malagasy francs has been earmarked for this purpose, and work on the laboratory will begin in 1991. It should be emphasized that this loan has been obtained from Swiss Cooperation, an aid program that has always displayed its desire to contribute to the social and economic development of our country.... At the same time the laboratory at Fianarantsoa will require total rehabilitation, while in Mahajanga a project for the construction of a similar laboratory is already being studied.

Regarding recent rumors reporting a suspension in the delivery of oxygen by SOAM [West African Maritime Company], it has been learned that no such thing happened, despite the unpaid bills owed to this company by HJRA. This means that the Ministry of Health has always "owed" money to SOAM. Nevertheless, this situation is being resolved because the ministry is prepared to make an intensive effort to do so.

Should we believe that the Ministry of Health has extended loans to no purpose? Whatever the case, we may conclude that it is not only sick persons who suffer from a crisis but equipment also.

## MAURITIUS

### Improved Conditions for Nehru Hospital Planned

91WE0301A Port Louis WEEK-END in French  
24 Mar 91 p 21

[Article: "Nehru Hospital Sees 500 Patients Per Day"]

[Text] There is a shortage of beds at overcrowded Jawaharlal Nehru Hospital. This was what WEEK-END discovered Wednesday during a visit to the hospital, which each day sees some 500 people, inpatients and outpatients. If the number of people coming to the hospital increases as predicted, the facility could very quickly reach the point where two people have to share a single bed—a terrible predicament, and one which the hospital administration wants at all costs to avoid.

The only solution is to start immediately on the hospital's second phase of construction, which would provide it with new wards where the desperately needed extra beds could be installed....

Now that the hospital has been almost fully out fitted, it is unfortunately apparent that some of the space is being used inefficiently—such as the open balconies, which the administration may decide to close in.

But for the moment, there are more urgent matters requiring action, such as the very major problem posed by the defective sanitary facilities. Most of these facilities are in the bathrooms and most are already out of order. Accordingly, the administration has ordered a complete renovation of the bathrooms, replacing some of the existing ones with the Asiatic toilets with which some patients are more familiar. A contract has been signed for this work.

Patients at Jawaharlal Nehru Hospital told WEEK-END they were generally very pleased with the quality of service provided, although sometimes it is necessary to wait awhile before being examined by a doctor. Dr. Baboo Ramdowar, regional health director of the hospital, said this problem will soon be resolved with the opening of a new department where all incoming patients will be processed. From the reception area they will be directed to other departments, depending on their medical needs. The problems in the emergency room will soon be ironed out, Dr. Ramdowar said.

### Uprooted

Although patients are glad they no longer have to make the long trip to Caudos to get hospital care, some of the staff seem to feel differently about it. Coming for the most part from the hospital at Caudos, they give the impression of being uprooted and find it difficult to adapt to their new circumstances. Many would like to return to Caudos.

In the first place it is a question of adjustment, but transportation is also a serious problem. Buses are not always easy to find, and this naturally has an effect on hospital operations. When the domestics are late arriving at the hospital, patients needing to be taken in their wheelchairs to the wards or elsewhere must cool their heels. This is a constant problem, we were told by those concerned.

The hospital administration for its part considers the staff highly motivated; for example, personnel take classes to learn how to deal with the public. The administration is convinced that once the hospital's start-up problems are resolved, it will be a match for any private clinic in the country.

### Transportation

To get to the hospital, the National Transport Corporation (CNT) has made available two minibuses that provide shuttle service from Rose Belle and La Flora. The fare is always the same—2 rupees—and we fully agree with Dr. Ramdowar when he says it is excessive. CNT is supposed to be providing a service to people who are ill; patients should not be forced to pay 4 rupees to travel to the hospital for medical attention.

How is it that CNT demands only 1 rupee to transport healthy people using the minibus that connects the north and south passenger terminals in Port Louis? CNT should immediately reexamine the fares for people in the south, many of whom live in very modest circumstances. That is Dr. Ramdowar's hope.

The two minibuses, which begin their rounds at 0600 hours and complete their last trip about 1810 hours, transport 800 people each day. Passengers have no complaint about the buses, but they say it is unpleasant having to wait in the sun at the hospital entrance. A bus stop shelter would be welcome.

In the near future, when the new road to the south is opened to traffic, the Savanne Bus Service might also

start serving the hospital at Rose Belle, it was announced. That would free people living in the most remote regions from the need to change buses to get to the hospital.

Within the next four months, according to Dr. Ramdowar, the hospital will complete its "shakedown" period and be in a position to offer service rivaling what is available at any of the private clinics. The chief physician had us visit the various departments of the hospital. The casualty room, which adjoins an intensive care unit for treatment of patients suffering from such things as asthma attacks and heart attacks, is a department in its own right. It also contains the X-ray section and is equipped for setting fractures or performing any minor surgical procedure.

We also visited the maternity ward, where we saw for ourselves the staff's devotion to the care of the premature newborns in their incubators.

#### Children Examined

The hospital at Rose Belle will not be content just to care for the infirm; it also firmly intends to do all it can for the schoolchildren in the south. Reports indicate a high percentage of children are suffering from malnutrition and have worms, parasites that rob the little tykes of their health and make it hard for them to succeed in school. A program will be established to allow these children to be examined by a doctor at least once a year. Treatment will be provided to rid the children of worms.

Through the community health centers, attention will also be lavished on pregnant women, in order to reduce the high mortality rate among newborns.

Although things are not as perfect as one might hope at Jawaharlal Nehru hospital, we must admit this modern hospital is a new source of pride for the south, and the well-meaning people in charge of it are sincere when they say they want to make it a center that offers patients both high-quality medical care and...a warm welcome.

### MOZAMBIQUE

#### Cholera on the Increase in Beira

MB1304091591 Maputo Domestic Service in Portuguese 0500 GMT 13 Apr 91

[Text] A total of 25 people have died of cholera in Beira, Sofala Province, since last March. According to DIARIO DE MOZAMBIQUE, the Beira Health Services had registered 265 cases of cholera in three urban and semiurban centers by Tuesday [9 April].

Sofala Provincial Health Director, Dr. Antonio Bomba, called on Beira residents to fight the disease to prevent a tragedy.

The Sofala Government has given the Beira City Executive Council 16 million meticals to hire trucks to collect garbage in the city. The council has only one truck collecting garbage in the city at present.

#### Cholera Kills 25 People in Marracuene District

MB1404143391 Maputo Domestic Service in Portuguese 1030 GMT 14 Apr 91

[Text] A total of 25 people died of cholera in Marracuene District, Maputo Province this month according to the weekly newspaper DOMINGO. According to the source, 15 of the victims died in Montanhana village, while the remaining 10 died in (Mecaneta-2) village. It added that nine cases of cholera have so far been registered in Marracuene District.

In order to cope with the situation the local health authorities have established a health post in (Mecaneta-2) and will establish another one in Montanhana village next week.

The head of community health services in Marracuene told the DOMINGO newspaper that the 25 people died of cholera in their homes, where it was not possible to give them immediate medical attention.

#### Pemba City Reports 2 New, 32 Confirmed Cholera Cases

MB1604200191 Maputo Domestic Service in Portuguese 1730 GMT 16 Apr 91

[Text] Another two cholera cases have been reported in Pemba city. Pemba health sources say that 32 confirmed and 282 suspected cholera cases have been reported since the outbreak of the epidemic in February.

#### Cholera Kills 19 People in Zambezia Province

MB1704162491 Maputo Domestic Service in Portuguese 1500 GMT 17 Apr 91

[Text] A total of 19 people in Alto Molocue District, Zambezia Province have died of cholera. According to Radio Mozambique in Quelimane, the cholera epidemic has affected more than 200 people since its outbreak in the district. The local health authorities pointed out, however, that the cholera epidemic is not worsening.

### Namibia

#### Report Says Malaria 'Still Rampant'

MB2704182491 Windhoek TIMES OF NAMIBIA in English 20 Apr 91 pp 1, 2

[Unattributed report: "Malaria: Still Rampant"]

[Text] At least 67 cases of malaria have been treated in Windhoek this month, with five patients being treated in the Intensive Care Units of the State hospital and Medicity [expansion not known]. Of these cases, one, a German tourist's condition is critical.

At the same time, a serious shortage of blood is still being experienced in the north of Namibia, according to the Regional Health Director in Oshakati, Dr. Shivute. This shortage is due to the large number of malaria cases being treated at hospitals in the north.



The number of malaria cases being treated at hospitals in Windhoek has increased considerably since last month. This is abnormal, as the incidence of this disease should decrease with the onset of colder weather. Sources at both the State hospital and Medicity said that the strain of malaria being treated this year is the same as that found in Namibia over the past two years. This strain has caused a large number of deaths since 1989.

However, the malaria strain seems to be developing considerable resistance to the usual methods of treatment, and as a result, people being admitted to hospital are usually much sicker than was the case in previous years. According to the Director of Medicity, Mrs. Annchen Parkhouse, her hospital treated 21 patients with malaria during April. Of these, nine are still in hospital, and one, a German tourist is still in the Intensive Care Unit. His condition is critical but the prognosis is fair. He has developed Blackwater Fever as a complication of the malaria.

Sources at the State hospital said that 46 cases of malaria had been treated there this month, of which three had to be transferred to the Intensive Care Unit as their condition was critical.

Mrs. Parkhouse pointed out that 30 percent of the patients with malaria in Medicity had not left Windhoek. They had developed the disease in the capital city, which was an indication that the malaria mosquitoes were breeding in open water in or around Windhoek. She said that while there were not as many cases of malaria this year as in 1990, the people were much sicker than in the past. This was because the disease was being caused by a more resistant strain that started developing two years ago and has gradually become more virulent.

In order to prevent the same situation developing next year, Mrs. Parkhouse suggested that all open water should be sprayed before the onset of the rainy season and then kept clean throughout the year. She also stressed the importance of early diagnosis and treatment.

With regard to the shortage of blood in the north, Dr. Shivute said that there was a considerable decline in the amount of blood donated this year when compared to last year. Last year 44,332 units of blood were donated, while only 12,933 units had been donated thus far this year. He appealed to donors to donate blood as the large number of malaria patients needed blood urgently.

## NIGERIA

### Over 1,000 Die of Meningitis, Gastroenteritis in Kano

AB2904184091 Paris AFP in French 2005 GMT  
23 Apr 91

[Text] Lagos, 23 Apr (AFP)—Over 1,000 people, including children, have died of cerebrospinal meningitis and gastroenteritis in Kano State (northern Nigeria) since those diseases broke out on a wide scale in January this year, according to official statistics quoted by NAN.

In March alone, 309 people succumbed to gastroenteritis, while 2,413 patients were admitted to the hospital and treated for it over the same period, the source stated.

## SENEGAL

### Leprosy Control Expected by 1995

91WE0291A Dakar SUD HEBDO in French  
28 Feb 91 p 7

[Article Iba Gueye: "An Illness Like Any Other"]

[Text] The 38th International Leper's Day was officially celebrated in Diambo, a few km from Podor, on Sunday, February 24. Diambo is one of Senegal's 10 "social reclassification" villages.

The world is now fighting the very idea of reclassification villages. The notion is the product of an old conception that has been fed by centuries of relegating lepers to pariah status. These sanctuaries are no longer taking in patients and are becoming villages like any other. The goal of Leper's Day is to take the mystery out of leprosy, which is neither a curse nor an unspeakable horror. On the contrary, like any other illness, it is transmitted to man by a microbe: the Hansen bacillus. Leprosy is still saddled with all sorts of prejudices stemming from false ideas and the fear they inspire. In reality, it is not hereditary and is only very mildly contagious (when untreated).

Eighty percent of those afflicted are not mutilated by the disease. Leprosy microbes are never present in a mutilated hand, even when it is oozing. Leprosy cannot be transmitted sexually.

Nothing less than a revolution in the treatment of leprosy has occurred during the eighties. In Senegal, the fight against leprosy has been transformed with the gradual introduction beginning in 1985 of polychemotherapy (Pct), the reorganization of the Department of Large-Scale Endemic Diseases, and the backing of international financial aid through the DAHW (a German association). Consequently, the organizations active in the fight against leprosy, such as ASAL (a Senegalese association) and ILAD (Dakar Applied Leprosy Institute) are planning to do a thorough medical inventory of the endemic disease in 1995. The number of patients in treatment will have dropped from 40,000 to 1,500.

As our ORTS (Senegalese Radio and Television Office) colleague Lamine Toure did with his program last Sunday, 24 February, the press will have to help in promoting the perception of leprosy as an ordinary illness, by popularizing scientific knowledge about Hansen's disease.

ILAD specialists consider traditional treatments wholly ineffective. For, in the words of Dr. J. Millan: "They consist of camouflaging the skin lesions, while the microbes act deep inside the body and in the nerves: Bad treatments cause the nervous complications that are responsible for mutilations." ILAD accuses the Keur Massar Center of having consistently spurned their

offers of dialogue, which they made so that a scientific trial to comparatively assess the effectiveness of the two medicines could be conducted.

This accusation is serious and worrisome. If curing the patient is all that matters, the Ministry of Public Health should initiate without delay an investigation of the work of Mrs. Pares, who instructs students at the Cheikh Anta Diop University Medical School.

## SOUTH AFRICA

### Health Official Denies Hepatitis-C Prevalent in Natal

*MB1904180391 Johannesburg Domestic Service in English 1600 GMT 19 Apr 91*

[Text] The director of the Natal Blood Transfusion Services, Professor Francisco Fernandes Costa, has denied reports that Hepatitis-C has invaded Natal, and said that the incidence of the disease was low. He said that although Hepatitis-C was dangerous, it was not a new horror disease, and was not rife in Natal as had been reported in newspapers.

Professor Fernandes Costa, said his service was probably the first in South Africa to test for Hepatitis-C, and that efforts had been intensified to make the blood donor base as safe as possible by testing for all dangerous viruses.

Hepatitis-C, which is transmitted by blood transfusions and infected body fluids, was discovered less than two years ago and testing kits only became available a year ago.

## SWAZILAND

### Malaria Kills Two Since January 1991

*MB1004101291 Mbabane THE TIMES OF SWAZILAND in English 10 Apr 91 p 24*

[Report by Vusie Ginindza: "Malaria Kills Two"]

[Text] Malaria has killed two people in different areas around the country since the start of this year.

Both deaths took place last month, at Ngwane Park and the Raleigh Fitkin Memorial Hospital in Manzini.

But Malaria Control Manager, Mr. Simon Kunene, says this does not indicate an upsurge in the sickness.

"On the contrary, the statistics show a decline in the number of cases, compared to the same period last year," he said.

Mr. Kunene said one of the cases, at Ngwane Park could not be properly analysed because his relatives refused a post mortem.

In all, 193 cases were diagnosed as positive malaria last month. This was the highest figure recorded since the beginning of this year. In February, only 96 cases were recorded.

The figure has remarkably declined as compared to those of last year during the same period, Kunene said.

"At the same time last year 381 cases were diagnosed positive," he said.

Mr. Kunene said most cases were recorded at Mkhuzweni Clinic in the Hhohho region.

Areas depending on this clinic include Ndlalambi, Malibeni, Mvembili, and other areas.

Overall, Mr. Kunene said the incidence of malaria is decreasing in the country, "probably because of the wide awareness on the disease," he said.

## UGANDA

### Moves Under Way To Control Meningitis Outbreak

*EAI204101691 Kampala Domestic Service in English 0700 GMT 11 Apr 91*

[Excerpt] The minister of health has confirmed that cases of meningitis are still being reported in the districts of Arua, Kotido, Soroti, Lira, and Kitgum. Reports have also been received about cases of meningitis in the neighboring Zaire and south Sudan on the northeastern borders. In a press release issued last evening, the assistant director of medical services and communicable disease control, Dr. Gilbert Mpigika, advised the public that all new cases of meningitis should be reported to the office of the district medical officer who in turn will inform the Ministry of Health. He said his ministry is in radio contact with district medical officers to make local assessment on medical needs and requests for assistance where required. He assured the general public that a number of measures have been taken by the Ministry of Health to contain the epidemic.

Concerning the cases of meningitis, Dr. Mpigika said in Kitgum district the first cases of meningitis were reported early this month and drugs and vaccines were immediately airlifted with the assistance of an Italian NGO [Nongovernmental Organization] (Agip). He added that a second shipment of vaccine had already been delivered. In Arua district, he said, the outbreak started at the beginning of 1990 and cases of meningitis are still being reported. As a measure to contain the epidemic, sufficient drugs for the treatment of cases have been continuously delivered to the district medical officer and immunization of the high-risk groups is still going on. The assistant director of medical services said senior officials from the ministry have just returned from the district to assess the situation. Cases of meningitis in Soroti district are still being reported since the year began, but drugs and vaccines have already been delivered to the area with the assistance of Uganda Red Cross. More drugs were recently supplied to Soroti district, according to the release. [passage omitted]

## ZAIRE

### Over 38,000 Refugees Enter From Sudan

E 11104183690 Kinshasa Domestic Service in French  
0500 GMT 11 Apr 91

[Text] There is a serious situation in northeastern Zaire in particular in the Dungu area and its surroundings, where many Sudanese refugees suffering from meningitis, measles, and hunger have arrived. Mboso Nkodia Pwanga, minister of public health, has discussed the presentativeness of international organizations. Kaboya Midika gives us some details.

[Begin recording] [words indistinct] In fact the health-year [word indistinct] a catastrophe in our country. Northeastern Zaire has been receiving, since [word indistinct], many Sudanese refugees at an average rate of 50 to 100 per day. This is due to the attacks carried out by Sudanese guerrillas in the Amadi region. The exact number of people recorded is 38,245, including 300 injured. However, according to the UN Office of High Commissioner for Refugees [UNHCR] representative to Zaire, there could be no less than 40,000 in [word indistinct] and the number could increase to 60,000 in June and even 100,000 by the end of the year.

The Sudanese refugees arrive with some diseases, particularly meningitis and measles, without forgetting the most important (consequence) of the fear-caused exodus, famine. Minister of Health Mr. Nkodia Pwanga has discussed the problem with representatives of UNICEF, [word indistinct], UNHCR [word indistinct] to find ways and means of facing the catastrophe. [words indistinct] could send (relief) in the form of milk powder, blankets, [passage indistinct] [end recording].

### Cholera Kills Nearly 50; Now Said Under Control

AB1704212591 Paris AFP in English 2102 GMT  
17 Apr 91

[Text] Kinshasa, April 17 (AFP)—Cholera killed almost 50 people in Zaire's deep southeastern Shaba province and infected some 250 others over the past several weeks before it was brought under control, a relief worker with Medecins sans Frontieres (Doctors without Borders) said Wednesday.

The water-borne disease struck at Kasenga, on the border with Zambia, in a region some 150 kilometres (95 miles) northeast of the provincial capital Lubumbashi. The aid worker was quoted by the AZAP news agency as saying:

A serious epidemic has recently been reported on the other side of the Zaire-Zambia border.

## ZAMBIA

### Malaria Now Nation's 'Major Killer Disease'

MB2304130091 Johannesburg SAPA in English  
1226 GMT 23 Apr 91

[Text] Lusaka Apr 23 SAPA—Malaria has become Zambia's major killer disease, with cases having more than

doubled in the past decade, SAPA's correspondent reported from Lusaka on Tuesday [23 April].

The latest statistics show malaria killed more people—particularly children and pregnant women—than any other disease in Zambia.

The Ndola-based Tropical Diseases Research Centre [TDRC], which is funded by the World Health Organisation, is currently conducting clinical and laboratory research to determine how to lower the number of malaria deaths.

On Tuesday TDRC Director Dr. Mushaukwa Mukunyandela said in an interview in Ndola, the capital of the Copper Belt, that 90 percent of patients had died of malaria due to complications.

"Drastic measures are needed to reduce this high mortality rate," he said.

Statistics showed that in 1976 one in eight people suffered from complicated malaria but by 1986, one person out of every five had a complicated form of the disease.

The figure was now estimated to be much higher.

Dr. Mukunyandela said: "Cases of related cerebral malaria have more than tripled and people are dying in large numbers as a result of this new complication."

A national malaria workshop, at which specialists are expected to formulate a national malaria policy that will help Zambia's medical sector to manage the disease, opened in Ndola on Tuesday.

Participants will focus on the clinical and laboratory diagnosis of malaria with special emphasis on the management of complicated cases.

Preventative treatment will also be discussed.

### Tuberculosis on Rise, 'Serious' Health Threat

MB3004082091 Johannesburg SAPA in English  
0754 GMT 30 Apr 91

[Text] Lusaka April 30 SAPA—Tuberculosis (TB) has become the biggest adult killer in Zambia today and the number of TB cases have soared dramatically, mainly because of the advent of HIV, the virus causing AIDS, experts have said.

Thirteen percent of all adult deaths are due to TB, 12 percent heart diseases, seven percent malaria, pneumonia and injuries and five percent diarrhoea, maternal complications and others.

Dr. Jan Andersson, acting national TB/leprosy specialist and Mr. David Mandoka, principal clinical officer in the TB control office says that the cases of TB had risen to 17,000 by the end of 1990 from about 7,000 in 1986.

Dr. Andersson described the TB incidence in the sub-Saharan region as "serious" in an interview today.

Seventy percent of TB cases in Zambia are related to HIV but all types of TB are curable. This does not mean that when one has TB one is HIV positive.

More than 60 percent of the Zambian population are infected by TB bacilli but have not developed the disease.

"But if one is infected by HIV and his immune system is impaired by HIV, the disease develops. People can be infected by TB but never develop the disease," Dr. Andersson said.

Mr. Mondoka said incidences of TB in the past had been relatively low as people had developed natural immunity against it. The incidence has now more than doubled as a result of HIV.

TB is occurring more in ages between 15 and 45 unlike in the past when it mainly attacked infants and the very old who have weaker immune systems. Mr. Mondoka explained.

The cases had stabilised between 1980 and 1983, showed a decline in 1984 but began to soar between 1985 and 1986. A chart from the TB/leprosy control unit shows a sharp increase from about 7,000 in 1986 to 17,000 in 1990.

The TB control unit was trying to cope with the problem with much support from the Dutch Government, Swedish International Development Agency (SIDA) and World Health Organisation (WHO) which sponsor all the TB drugs.

Dr. Andersson said the unit effectively coordinates the monitoring of all incidences in the country.

The Western Province has the highest TB figures but the experts believed it may not be because of HIV. Investigators are going on to determine the causes.

Half of all the beds in medical institutions were taken up by TB and AIDS patients and there was need for more facilities, said Mr. Mondoka.

#### **Cholera Campaign Said Hampered by Rain, Fraud**

91WE0309A Saint-Denis LE JOURNAL DE L'ILE DE LA REUNION in French 22 Feb 91 p 32

[Article entitled: "Cholera Epidemic in Zambia: 600 Dead"; first paragraph is LE JOURNAL DE L'ILE DE LA REUNION introduction]

[Text] In Lusaka's most luxurious hotel, a notice informs clients that henceforth, "due to the cholera epidemic" only cooked food will be served in the restaurant and all fresh fruit and vegetables will be banned from prepared dishes.

For the second year in a row, a cholera epidemic has broken out in Zambia. It has already taken 600 lives there, including 50 in Lusaka, the capital. Six thousand cases have been officially reported.

There is a shortage of everything in the capital's hospitals, and the Zambian health minister Jeremiah Chipikwa

has acknowledged that medical centers are facing a severe shortfall of medications, transport, and linen. Lusaka's four anticholera centers are bursting at the seams and, for lack of morgue space, corpses are crowding the beds, preventing new patients from being admitted.

The humanitarian organization Physicians Without Frontiers sent three people and 10 metric tons of supplies and equipment to Zambia at the beginning of the week. According to its coordinator in Lusaka, Sylvie Cusset, the team will first travel to Luapula province in northern Zambia, which is the region hardest hit, before moving on to other regions and eventually to the capital.

#### **The Danger of the Rains**

The epidemic began in October in the Copperbelt region and Luapula province in the north. According to official figures, 6,000 cases of cholera have been reported in the country, including 417 cases in the capital alone since 14 January. But medical circles estimate that the number is much higher and that the torrential rains now beating down in Zambia will only aggravate the situation.

At the Railway Clinic near the Lusaka rail station, hastily constructed cardboard signs sport skulls and a single word, "Cholera." Under a tatty gray blanket, seven-year-old Kabamba Nuru is just barely emerging from a coma. In Dr. Albert Kaluba's opinion, the child, who has been placed on IV fluids, will have a good chance of recovering. In an adjoining room, three corpses have still not been picked up. Lying next to them on makeshift beds are women and children receiving IV fluids. In other dispensaries, the patients are lying directly on the ground, for lack of beds.

An Egyptian physician Dr. Mohammad Hassan, who is in charge of the center, tells us that the Railway Clinic has not treated anything but cholera patients for the last two months. Dr. Kaluba works 17 hours a day and believes, with some discouragement, that the cholera scourge "is becoming endemic" in Zambia, "for lack of sanitation and because of the dilapidation of the health infrastructure."

#### **Uncovered Latrines**

Despite substantial material aid from donors last year during the first cholera epidemic, the level of public sanitation has shown hardly any sign of improvement, notably in Lusaka, where in slums the latrines overflow uncovered and the children play in stagnant water.

Moreover, observers note that medical personnel—especially nurses, who are underpaid and not well equipped—show little enthusiasm for working overtime. They also point out that supplies and medications are often diverted and resold on underground markets.



### **Cholera Kills 465 of 5,187 Cases in Lusaka**

91WE0294A Lusaka SUNDAY TIMES OF ZAMBIA in English 17 Feb 91 p 1

[Excerpts] (Zana)—Four hundred and sixty five people have died from cholera in Lusaka, Minister of Health Dr. Jeremiah Chijikwa said yesterday.

Dr. Chijikwa said Lusaka had 5,187 suspected cases of cholera by last Wednesday, giving a death rate of nine percent.

Seven provinces have so far been hit by the cholera epidemic leaving only Western and North-Western Provinces.

The epidemic would be more expensive to contain because the disease has spread on a wider scale while the rains have aggravated the situation.

He warned people against unnecessary mobility, even for funerals.

Dr. Chijikwa appealed to the police to help in the cholera prevention by effectively stopping street vending which had contributed greatly to the epidemic. [passage omitted]

In Ndola, parents at Northrise primary school which has been turned into a cholera centre have appealed to local health authorities to find an alternative facility, because the premises may remain infected long after the epidemic has abated.

The school's parents teachers association chairman, Mr. Jerome Bana said parents feared the disease may remain because the school uses a septic tank which is not connected to the main sewer outlet.

However what has angered the parents and also residents in the neighbourhood is that most of the cases being attended to at the school are not from Northrise itself.

"Most cases are from Chipulukusu and Nkwazi townships, we know that there has not been a case of cholera from Northrise itself, and so why should they bring cholera to a zone which is cholera free?" asked Mr. Banda.

And Mumbwa governor, Joel Chizyama has directed UNIP section chairmen to supervise cleanliness in their areas to prevent cholera from spreading to Mumbwa.

### **Cholera Spreads to Southern Province, Kills 10**

91WE0294B Lusaka TIMES OF ZAMBIA in English 20 Feb 91 p 3

[Text] Cholera has spread to Southern Province which had escaped an earlier outbreak of the killer disease, killing 10 people.

The areas affected are Jamba and Shamwiinga in chief Sikoongo and Sinadambwe of Siavonga.

All the victims died within seven days after the disease broke out last week, allegedly taken there by a visitor who was the first to die.

However administrative officer at Siavonga sub-district council Mr. Alfred Hakazembwe, yesterday said the deadly disease was under control.

In a telephone conversation with the TIMES in Livingstone, he disclosed that Chikankata Mission Hospital was tackling the epidemic in Shamwiinga.

In Jamba, about 65 kilometres west of the sub-boma, medical staff from Siavonga were attending to patients with help from Livingstone.

Mr. Hakazembwe said treatment centres had been opened at Jamba and Shamwiinga primary schools, where classrooms were being used as wards.

He said the medical teams had sufficient drugs to combat the disease. Fresh supplies were expected from Livingstone and Lusaka.

He added that four cases of cholera had been reported at Chirundu's Mutendere Mission Hospital, but these were awaiting official confirmation.

Meanwhile, wide-spread cases of dysentery have been reported in the province, after a serious attack occurred at Hillcrest Secondary School in Livingstone last week.

According to informed sources incidences have been reported in nearly all the seven districts in the province, but no deaths have been reported so far.

On the Copperbelt provincial council of education chairman Cde. Peter Chanda has accused the Ministry of General Education, Youth and Sport of delaying the re-opening of schools in Ndola shut for fear of cholera spreading to students.

Cde. Chanda, who is provincial political secretary, said in Ndola yesterday that the ministry was responsible for cleaning and repairing the schools to make them habitable so that pupils could resume learning but it was taking its time.

He exonerated the cholera surveillance task force of any blame in the delay because the medical team's responsibility was merely to inspect the institutions.

The ministry and the district council were supposed to work closely to ensure that the schools re-opened.

ZCCM had given the council money, part of which was to be used to buy items needed in the work being carried out by the council and the ministry.

Cde. Chanda did not say how much money ZCCM had given but promised to do so when he gets the figures today.

"ZCCM gave out the money with specific guidelines on how to spend it. But the remaining money is to be used in schools," Cde. Chanda said.

The work to repair the schools was being done in stages. Now work was going on at two secondary schools then workers would move to primary schools.



**Gwembe Cholera Toll: 68 Deaths, 986 Cases**

91WE0294C Lusaka *TIMES OF ZAMBIA* in English  
23 Feb 91 p 2

[Excerpt] (Zana)—Sixteen people have died from cholera in Jamba, Sikongo and Siamwinda areas of Gwembe district since the outbreak of the disease.

Southern Province permanent secretary Comrade Austen Mweemba said in Livingstone yesterday he was receiving constant reports from the provincial medical officer, Siavonga hospital and the chief administrative officer in Siavonga.

Medical teams were sent to the area and centres established to treat cholera patients.

He said the situation was under control and advised people to strictly observe medical instructions.

In Chongwe near Lusaka the death toll has risen to four since the disease was reported in the area a week ago.

Two people died at Kamwaya village in Nyangwena area on Tuesday.

The first victim died in Kampekete village on Saturday last week on his way to Chongwe treatment centre. His wife and child have since been quarantined.

Since the outbreak the department of health in Lusaka Rural has set up Nyangwena rural centre and the welfare hall as treatment centres for cholera victims.

Health personnel in the district said the situation was likely to improve with arrival of medicines, including intravenous fluids.

Last Tuesday, fluids and other vital medicines ran out at the centre.

Patients were sleeping on the floor with no mattresses and blankets. No food stuffs or fluids were supplied.

In Kabwe, Central Province permanent secretary Cde Khama Maimbo announced that the number of new cholera cases admitted to treatment centres had drastically dropped.

"There is a big improvement in the number of cholera patients admitted to centres during the past few days," Cde Maimbo said.

Nine new cases were admitted to centres with Ngungu leading by five, followed by Makululu with two and Nakoli and Chindwin Barracks recording one case each.

Just a week ago, new cases being admitted to hospital were as many as 30 patients a day.

Cde Maimbo attributed the reduction to the abundance of water from the newly constructed Kabwe surface water scheme which started pumping three days ago.

"The water flow has improved in town and this is facilitating the handling of cholera cases by medical personnel," he said.

So far, 68 people have died from the disease out of 986 cases reported to the centres where 782 people have been treated and discharged. [passage omitted]

**Details, Statistics on Cholera Outbreak****Breakdown by Province**

91WE0315D Lusaka *TIMES OF ZAMBIA* in English  
8 Feb 91 p 1

[Excerpt] A total of 393 people have died from suspected cholera countrywide as the death toll in the capital reached 37, the Ministry of Health announced yesterday.

In Chipata, the death toll rose by 11 from 50 last week to 61.

Health deputy permanent secretary Mrs. Helen Matanda said the first cases of suspected cholera broke out in Lusaka on January 6. So far 37 people have died in the capital, 36 cases were being observed by yesterday, 21 have been discharged. A total of 152 have been discharged after treatment.

The number of patients still in treatment centers stood at 42 bringing the total number of cases to 251.

The epidemic had shown signs of decline in Northern and Luapula provinces with the last three cases in Luapula being treated on January 31.

The success of the health campaign against scourge has been attributed to contact tracing and disinfection of homes, toilets, surroundings of suspected cholera cases and the hyperchlorination of water supply sources.

By Tuesday, there were no suspected new cases of cholera in Luapula and the total number of discharges stood at 292 with 32 deaths.

The total number of discharges in Eastern province since cholera broke out there stood at 444 with 68 patients still at cholera treatment centers.

Mrs. Matanda said there were so far 159 deaths on the Copperbelt from suspected cholera with 109 still under treatment and the total figure of suspected cases in the province stood at 1,980.

By Tuesday, there were 31 suspected cholera patients 2 discharges and two deaths.

The situation in Northern Province where the disease first occurred has improved with only four cases being reported on Tuesday while six were discharged and one person died.

So far 427 people have been discharged in the province while 57 have died and 24 were still in treatment centers bringing the total number of cases there to 508.

Of the total 47 deaths in Central Province since the disease broke out, only one person died on January 6 while there were 24 suspected cases and the same number of discharges leaving 70 patients still at treatment centers.

Mrs. Matanda said one case had been reported in Mazabuka, the only report in Southern Province.

In Kitwe, the district cholera committee yesterday closed down Luangwa primary school because of poor sanitary facilities.

#### **Over 400 Deaths; 4,377 Occurrences**

91WE0315C Lusaka SUNDAY TIMES OF ZAMBIA in English 10 Feb 91 p 1

[Excerpts] Donor countries and agencies have not come forward to help Zambia fight the current cholera outbreak because the epidemic could have been avoided, vice chairman of the national cholera surveillance committee, Dr. Sam Nyaywa said in Lusaka yesterday.

Speaking on Kwacha Goodmorning Zambia television programme, Dr. Nyaywa said the country was aware that the causes of the epidemic were poor water supply and bad sanitation, which could have been dealt with.

He said unless these measures were implemented, the cholera outbreaks would continue recurring.

Dr. Nyaywa said as of Friday, 4,377 cases of cholera had been reported throughout the country, and 424 people had died of the disease.

He said the current outbreak was more than double the last cholera epidemic which recorded about two thousand cases throughout the country.

As a preventive measure, the Ministry of Health was currently distributing chlorine to all district councils to chlorinate water wells especially in townships to ensure that people drank clean water.

And the number of confirmed cases of cholera in Kitwe has risen to ten but no deaths were reported yesterday.

Two new cholera patients were sent to Chimwemwe clinic from Kitwe Central Hospital observation point bringing the number of patients there to four. Six were being treated at ZCCM-run Chamboli clinic.

Medical personnel said in Kitwe that since the epidemic broke out last December four people have died from it.

And three cholera centers in Lusaka continued to admit more new cases against a background of inadequate facilities to combat the disease.

Although the centers had some drugs, such facilities as special cholera beds and transport were lacking.

Lusaka's cholera centers are the Railway clinic, which by 19:00 hours yesterday had admitted five new cases. Chingwele and Chawama community hall where figures were not readily available.

Medical sources said apart from transport for patients vehicles were required to enable health inspectors visit patients' homes to disinfect them to avert the spread of the disease.

#### **Cases Drop in Kabwe**

91WE0315B Lusaka TIMES OF ZAMBIA in English 28 Feb 91 p 2

[Excerpts] All secondary schools in Central Province closed because of cholera outbreak last January will re-open on Monday.

Provincial Member of the Central Committee, Cde. Fenwick Chifunda announced the re-opening of the schools and appealed to pupils and parents to take the announcement as official.

Cde. Chifunda said cholera which had so far killed 68 people in Kabwe was on the decline. The situation in secondary schools was conducive to allow students to return to school.

#### **Outbreak in Kemba, Luyuba**

91WE0315A Lusaka SUNDAY TIMES OF ZAMBIA in English 3 Mar 91 p 7

[Excerpt] Mpika district medical officer Dr. Marvis Danen yesterday complained about the inaccessibility of Nabwalya valley where cholera is reported to have broken out.

Dr. Danen said the valley was unapproachable to motor vehicles especially during the rainy season and appealed to Government to use air transport.

He expressed fear that many people could have died of cholera since it took four days for a report to reach him.

The doctor said the rural health center there had some stocks of drugs that could be used in the treatment of cholera, and that he had despatched some on foot.

He said cholera could be more fatal in a valley lacking broader health education, a thing which he said should draw Government's prompt attention.

Meanwhile, Dr. Danen has announced that one more cholera case of a traveller from Ndola was admitted at Mpika hospital yesterday and described the condition as improving.

In Monze, reports were that the disease had now spread to Kemba and Luyaba in chief Chongo's area where six people had so far died.

Monze district health inspector Mr. Musa Lumanu confirmed the deaths of the six victims yesterday and added that six more were admitted at Luyaba rural health center about 17 kilometers west of Monze.

#### **Unidentified Disease Killing Cattle**

91WE0312B Lusaka TIMES OF ZAMBIA in English 8 Feb 91 p 2

[Excerpt] A strange cattle disease known as lumpy skin has broken out in Kabwe Rural killing a number of cattle.

Kabwe Rural governor Cde. Willard Ntalasha said in Chibombo yesterday that the disease which causes

lumpy sores on the animal skin has appeared in Keembe area of Kabwe Rural where it has killed several cattle

Cde. Ntalasha who did not give the number of the cattle killed so far said the disease was a great danger to cattle lives and called for quick remedial measures to control the disease

Cde. Ntalasha has also blamed peasant farmers in his district for failing to control and prevent the threat of another cattle killer disease—corridor.

He said although peasant farmers in the area knew that corridor disease which was rampant in the district was caused by ticks, most of them were reluctant to buy medicine to dip the animals.

### **Free Animal Dip To Control Corridor Disease**

91WE0294D Lusaka *TIMES OF ZAMBIA* in English  
23 Feb 91 p 3

[Text] (Zana/ZIS)—The department of veterinary and tsetse control in Southern Province has suspended the payment of the compulsory K5 levy charged for dipping an animal.

The decision which was with immediate effect, was announced by Choma governor Cde Edward Limande and is aimed at controlling the spread of corridor disease, which has broken out in some areas.

Cde Limande who was addressing a public meeting at Kakuba primary school in Pemba appealed to villagers and farmers to cooperate with veterinary officers by ensuring that their livestock was taken to the dip four times a month.

Earlier, Southern Province provincial medical officer Mr. Dominic Miyoyi called for controlled movement of livestock between districts in the province as a means of controlling the spread of corridor disease.

Meanwhile, Cde Limande carpeted civil servants in the area for failing to serve the people's needs through neglect of duty

### **'Lumpy Skin Disease' Kills Ndola Cattle**

MB1704203991 Lusaka *Domestic Service in English*  
1800 GMT 17 Apr 91

[Text] More than 20 cattle have died within nine days in Ndola Rural Central [not further specified] from lumpy skin disease which has broken out in the area, senior veterinary assistant Mr. Chibunda confirmed today, saying more animals were expected to die because there was no treatment for the disease.

He said his department was helpless because it had no preventive vaccines to contain the outbreak and save some animals. He advised farmers to slaughter the animals already suffering from the disease to prevent it from spreading further.

## **ZIMBABWE**

### **Malaria Kills 20 in Gokwe in 1991**

MB2504103391 Johannesburg *SAPA* in English  
2341 GMT 24 Apr 91

[Text] Gokwe, Zimbabwe, April 24 SAPA—Twenty people have died from Malaria in the Gokwe district of Zimbabwe since the beginning of this year, according to district medical officer Dr. Milton Chemhuru.

ZIANA national news agency quoted Dr. Chemhuru, who also heads Gokwe district hospital, as saying the institution had, since the beginning of the year, dealt with 18,237 malaria patients.

Besides the hospital, the district's 37 clinics had handled a further 18,803 cases since January, Dr. Chemhuru said.

Gokwe has suffered recurrent malaria outbreaks in the past few years, with more than 250 people dying of the disease in 1989 alone.

### **Epidemic Disease Control in Zhejiang Province**

91WE0087D Beijing GUANGMING RIBAO in Chinese  
9 Oct 90 p 1

[Article by Lu Xiaoli [0712 1420 0448], apprentice reporter, and Ye Hui [0673 6540], GUANGMING RIBAO reporter. "Epidemic Disease Control Research in Zhejiang Province Scores Goal After Goal—Some 20 Accomplishments at Leading Domestic and International Levels Reported"]

[Text] This decade has witnessed an array of achievements in epidemic disease control research in Zhejiang Province. The successes exemplified by some 20 scientific findings and contributions at leading domestic and international levels including the breakthroughs made in the control of measles and hepatitis A and B as well as the vaccine for hemorrhagic fever, which was just approved for public release on 20 September of this year.

In 1989, Zhejiang Anti-Epidemic Station in collaboration with other public health services, completed a 15-year clinical investigation to determine the duration of protection of the vaccine. The study was conducted through immunizing and following up a population of several hundred thousand in the Zhuji [6175 2555] area. The result clearly indicated that the occurrence and spread of measles can be controlled by measles immunization. This was the first time that a clinical study has been conducted on such a large scale with so perseverant an effort anywhere in the world.

Informed public health experts estimated that over 4 billion of the world population is susceptible to the threat of hepatitis A. About 2 million Chinese are diagnosed with this disease every year. A hepatitis A vaccine, developed by Mao Jiangsen [3029 3068 2973] of the Zhejiang Academy of Medical Sciences after a 10-year intensive study, has just been approved for public release by the Ministry of Public Health. This achievement is the first success in man's effort to control hepatitis A.

The onset of hepatitis B is more insidious than hepatitis A; however, once infected with this disease, patients become life-long carriers of its virus and will pass them on to the next generation. It is estimated that as many as 100 million individuals in China are infected by the hepatitis B virus. The medical community has long been baffled by the pathway through which the hepatitis B virus is transmitted from mother to the infant during pregnancy. In 1983, researchers at the Infectious Disease Institute of Zhejiang Medical University discovered evidence suggesting that the viral infection actually takes place within the uterus and they were the first in the world to be able to map out pathologically the transmission pathway of hepatitis B. Their discovery established the necessary conditions for further study in combating this disease. The Infectious Disease Institute had also successfully developed a hepatitis B vaccine which has been shown, through an eight-year clinical study, to be 80 percent effective in preventing the infection of the disease.

In 1986, our whole country was shocked by the first discovery of AIDS in Zhejiang: four patients tested positive for the HIV virus. This report soon led to another pleasantly surprising news report that the immune function of AIDS patients is restored and improved by treatment with a Chinese medicine called "AIDS 1," developed by Associate Professor Wang Xuao [3769 4872 7663] of the Public Health Administration of Zhejiang. A 13-year-old school child, after receiving the treatment, has recovered enough not only to go back to school, but also to participate in a 100-meter race as well. This drug also restored another patient's health so that he was able to return to his manufacturing job. Soon thereafter, the public health authority was showered by inquiries of "AIDS 1" and requests to collaborate in further study of its therapeutic use from institutions abroad. Currently, research projects are jointly conducted with Thailand, Australia, and some 10 other countries.

Epidemic hemorrhagic fever is an infectious disease that induces a relatively high death rate. In 1983, a head physician at the Zhejiang Anti-Epidemic Station, Dr. Zhu Zhiyong [4281 2535 0516] found that gerbils and rabbits are susceptible to this disease and identified them as natural animal hosts for producing hemorrhagic fever vaccine. Data presented in an international conference held in South Korea in 1989 had shown that Dr. Zhu's vaccine produces the highest level of neutralization antibodies in human serum of all similar vaccines available. This vaccine produces over 90 percent positive response.

Committed to promoting excellence in the infectious disease research, the Zhejiang Province Government, Zhejiang Provincial Science Commission, and Zhejiang Public Health Department have given high priority to infectious disease projects over other scientific R&D programs. Their general policy of focusing funding on selected programs and sparing little effort to support scientists in their research activities is regarded as a big boost to the advancement of scientific research.

### **Vice Health Minister on Correcting Public Health System**

OW1904212191 Beijing XINHUA Domestic Service  
in Chinese 1157 GMT 15 Apr 91

[Excerpts] Beijing, 15 Apr (XINHUA)—In a telephone conference on national public health system held today, Sun Longchun [1327 7127 2797], vice minister of public health, stressed: We should make the important tasks in public health work this year advocating high morality and good style in the public health profession, strengthening continuously the building of a clean government, and correcting any unhealthy practice. [passage omitted]

In summing up the past work of rectifying the public health system and correcting unhealthy practices in this profession, Sun Longchun said that "it represented a good beginning, with notable improvement being made in medical and public health order, effective control of the problem of wanton collection of fees, and a few

people in the medical profession with corrupt morality and practices being investigated and dealt with."

He said: Apart from investigating and dealing with cases of unhealthy practices in this profession, we have done a large amount of work directed at the problem of cadres and workers whose sense of observing discipline, abiding by the law, healing the sick, rescuing the dying, and practicing revolutionary humanitarianism has weakened in recent years. We have strengthened the ideological-political work and developed professional ethics education among workers in the public health system. [passage omitted]

While affirming these results, Sun Longchun specially pointed out: Development in the work of correcting

unhealthy practices has not occurred even between various localities and units. A few leaders have not attached enough importance to this or taken effective measures. These factors have affected both the depth and breadth of the efforts aimed at correcting unhealthy practices throughout the whole of the public health system. In light of this, we must make protracted, arduous efforts. [passage omitted]

The telephone conference today was presided over by Public Health Minister Chen Minzhang. Responsible persons of public health departments and bureaus, and relevant units in various localities attended the conference in their respective areas.



## THAILAND

### **Amebic Meningoencephalitis Incidence, Treatment**

91WE0286C Bangkok SIAM RAT in Thai  
5 Feb 91 pp 1, 2

[Excerpt] [passage omitted] Associate Professor Phanochit Chariya, the head of the Porosit [translation unknown] Department and Associate Professor Nippon Phuangwirin, a member of the Pathology Department, Faculty of Medicine, Sirirat Hospital, Mahidol University, conducted a study to diagnose and treat patients with amebic meningoencephalitis. This was the first successful treatment in Thailand and only the fifth in the world.

Associate Professor Phanochit said that in Thailand, during the period 1983 to 1989, there were five reported cases of amebic meningoencephalitis. All five died within just seven days after contracting the disease. The researchers conducted the study by taking spinal fluid from the patient with this disease. They found that the causative organism was an amebic organism of the *Naegleria Fowleri* type, which is a very virulent type of organism. It enters the body through the nose and travels to the brain, where it begins to kill brain tissue and destroy blood vessels in the brain. Initially, the patient exhibits symptoms similar to those of people who have the flu. That is, they have a congested nose, a high fever, and a terrible headache. The symptoms then become more severe. They feel nauseous and vomit, lose their appetite, lose consciousness, and die within two to three days.

Surveys have found that this type of amoeba is present in natural sources of water, wells, slow moving streams, mud, and water sources around industrial plants. It grows well in water at a temperature of 45 degrees Celsius. Thus, this organism thrives the best during the summer season. This organism was found in water sources in Sisaket, Ubon Ratchathani, Nakhon Ratchasima, Kalasin, and Surin provinces and in Bangkok. The only way to contract this disease is to take in water containing this organism through the nose. Most of the patients have been healthy children who liked to play in the water sources mentioned above. Thus, the disease can be prevented by taking precautions to ensure that children do not take in water through the nose. Or they should keep their heads out of the water. Because as of now, there is no vaccine that can be given to prevent this disease.

In an interview, Dr. Nippon, who has conducted studies on treating this disease, said that the patient who was treated recently and who survived is a 60-year-old patient from Sisaket Province. He was diagnosed as having the disease by taking a sample of his spinal fluid, which was found to contain the amoeba, which resembles a white blood cell. Diagnosticians must be very

accurate and quick, because better results will be achieved if the person is treated as soon as possible. In the past, this disease was treated using two types of drugs that have many side effects. Today, Ketoconazole is also being used to treat this disease. Good results have been achieved with this drug, and there are fewer side effects. In the most recent tests done on this patient, no organisms were found in his spinal fluid. He has been fully cured. This is the first time that a Thai patient with this disease has survived, and he is only the fifth person in the world to live.

Dr. Nippon said that it is thought that many people have died from this disease. Initially, they exhibit symptoms similar to those of viral meningitis, which is transmitted by mosquitoes, and so they are not given the right treatment. They could actually have the disease caused by this type of amoeba. But because of the inaccuracy in tapping the spinal fluid in order to check for amoeba, the patient dies before he can be treated. The medical team studying this disease will study the efficiency of various medicines and the proper doses needed to kill the amoeba in test tubes so that the findings can be used to cure other patients with this disease.

### **Melioidosis Mortality Rate in Northeast**

91WE0286B Bangkok SIAM RAT in Thai  
13 Feb 91 p 16

[Excerpt] Associate Professor Suphaphon Phuaphoemphunsiri, an instructor with the Clinical Microbiology Department, Faculty of Medical Technology, Khon Kaen University, said that Melioidosis, a contagious disease, is an important problem in the country. The largest number of cases has been found in the northeast, and the number of cases is increasing. Doctors are becoming more familiar with and are beginning to pay more attention to this disease. Moreover, they are now better able to diagnose this disease.

Associate Professor Suphaphon said that how this disease is transmitted is not yet clear. But according to various reports, it is thought that the disease enters the body through skin abrasions, by inhalation and ingestion, and through sexual intercourse. Studies have found that those at risk of contracting this disease include those who frequently come in contact with soil and water and who have wounds or sores that have been contaminated by dirt or water. The disease is frequently found in women ages 30 to 60, but more men than women contract this disease. Incidence is highest among farmers.

Associate Professor Suphaphon said that the infection attacks various organs of the body. The organs affected most often are the lungs, the liver, the spleen, and the heart. Onset of the disease is rapid, and the patient may die within 45 to 72 hours. The death rate is 80-94 percent. The disease may also exhibit another form and

be quite acute or chronic. In most patients, the disease attacks the lungs. Patients have a fever and a chronic cough. Their symptoms are similar to those with pulmonary tuberculosis.

## VIETNAM

### Netherlands Helps Finance Anti-Malaria Program

*BK2204084691 Hanoi VNA in English 0628 GMT  
22 Apr 91*

[Text] The Netherlands-Vietnam Committee has financed an anti-malaria programme in Vietnam with 200,000 U.S. dollars in the form of chemical substance, medicines, and medical equipment.

This three-year programme is being carried out in the mountain district of Son Hoa, Phu Yen Province (Southern Central Vietnam), experimentally with composite methods. A course on anti-malaria measures has been opened for 24 medical workers in the district.

The non-governmental organization Terre Des Homes has granted 15 million Vietnamese dong to the Women's Union of the Mekong River Delta province of Ben Tre to help 107 families to develop pig-breeding and 42 others in shrimp rearing. A course on pig-breeding was opened for 45 women.

### Do Muoi at Polio Eradication Ceremony

*BK2404015491 Hanoi VNA in English 1301 GMT  
23 Apr 91*

[Text] Hanoi VNA April 23—A ceremony was held here today to launch the national programme for acceleration of immunization and polio eradication in the period 1991-95.

It was attended by Chairman of the Council of Ministers Do Muoi, Public Health Minister Pham Song, and representatives of WHO and UNICEF offices, mass organizations and all provinces throughout the country.

Thanks to the efforts of the health service, the support of the population and the assistance of international organizations, especially UNICEF, in 1989 Vietnam reached the universal child immunization target of 80 percent coverage for children under one year of age, and it sustained this level of coverage for 1990, the second year. The EPI acceleration and polio-eradication programme for 1991-1995 aims to increase the immunization coverage for children under one year of age to 85-90 percent in the period 1992-93 and more than 90 percent in 1994-95. At the same time, more efforts will be made to accelerate rehabilitation for the disabled at the grass-roots level and eliminate polio virus in eleven cities and provinces by 1993 in order to eventually make the whole country free from this virus by the end of 1995.

Speaking on the occasion, representatives of the international organizations and mass organizations pledged to do their best to make the programme a complete success.

## BULGARIA

### Typhoid, Influenza, Polio Cases Reported

91P202994 Sofia DUMA in Bulgarian 71 Mar 91 p 2

[Article by Katya Karagyaurova "Village of Strazha Is Center of Typhoid Outbreak"]

[Text] The increase in upper respiratory tract infections by one and a half to two times the usual rate for Sofia and some regions of the country lends credence to the view that an influenza epidemic has begun during the past 10 days or so, according to Professor Dundarov, Director of the Institute for Contagious and Parasitical Diseases, who briefed the government's Commission for the Struggle against Epidemics and Contagious Diseases yesterday.

There are outbreaks of influenza in the Gabrovo, Razgrad, Ruse, Silistra, and Dobrich regions and in a number of schools in Sofia. Up to now, Virus B has been isolated in Sofia, but there is no evidence that it is the only strain in the country. Specialists believe that this virus produces localized epidemics. Children up to age 18 and people over 50-60 are at risk. The last epidemic of Influenza B in our country occurred in 1974.

According to information of the World Health Organization, there are outbreaks of B, A, and A-1 influenza in Yugoslavia, the Netherlands, Czechoslovakia, and Poland.

Last week in the village of Strazha, Turgovishte Oblast, an outbreak of typhoid flared up. Six persons are sick, including one child. This village is the site of earlier outbreaks, there have been 15-20 cases in the last 10 years. Steps are being taken to limit the spread of the disease, such as sealing wells and purifying water supplies. However, officials from the Ministry of Health Services believe that our doctors are not able to diagnose the disease because of a lack of experience.

The number of cases of poliomyelitis (infantile paralysis) has already reached 38. The age of its victims has increased to two and one-half years. The virus is even striking children who have completed their immunizations. In the opinion of epidemiologists, one reason that the infections are spreading so easily is declining personal and public hygiene.

### Ministry Denies Polio Shots for Gypsy Sterilization

4U 2404130591 Sofia BTA in English 1227 GMT  
24 Apr 91

[Text] Sofia, April 24 (BTA)—Last night the Ministry of Health announced that the outbreak of a poliomyelitis epidemic in January required the immediate emergency immunization and reimmunization with poliomyelitis vaccine of all children under the age of 2 and of children under the age of 7 who for various reasons have never been or have been incompletely immunized.

Most of the children taken ill with poliomyelitis belong to gypsy families. They have incomplete or no immunization against this disease. Their families have low health awareness and live in inadequate sanitary conditions. Medical staff therefore have to make special efforts in gypsy child care. At the same time, the Ministry of Health is seriously concerned by the rumours that "the immunization is intended to sterilize gypsy children." This allegation is monstrous and slanderous.

In the region of Razgrad the emergency immunization against polio has stirred social tension. Bulgarian citizens belonging to the gypsy and the Turkish ethnic groups resist the health service measures. The Ministry of health declares that the immunization against poliomyelitis and all other immunizations administered to children in Bulgaria are absolutely harmless and necessary for their protection against diseases.

It should be emphasized that after the emergency immunization the incidence of poliomyelitis has dropped considerably and the risk of epidemic presumably has been eliminated.

## REGIONAL AFFAIRS

**Caribbean Measles To Be Made 'History' by 1995***FL2204234291 Bridgetown CANA in English  
2019 GMT 22 Apr 91*

[Article by Colin King]

[Text] Bridgetown Barbados April 22, CANA—Caribbean countries supported by several regional, international, and other organisations, Monday launched a programme to "make measles history" by eliminating the disease by 1995.

The programme aims to immunise at least 2 million children, aged nine months to 15 years, on the way to setting a worldwide precedent for elimination of the mainly children's disease, linked by one study to 4,000 deaths per day, worldwide, in 1988.

Six Caribbean Community (Caricom) health ministers, and top officials of other Caricom states, Pan American Health Organisation (PAHO), United Nations Children's Fund (Unicef), Caricom secretariat, Canadian Rotary and Public Health Association, and other collaborating organisations attended the launching at the Barbados Hilton.

The initial focus is on Measles Elimination Month, next month, when parents are being asked to collaborate with health workers to ensure children are vaccinated or revaccinated. The programme of immunisation will be ongoing, with a 1991 target of 95 percent immunisation of children in the English-speaking Caribbean countries and Suriname, Barbados Health Minister Brandford Tait said at the launching.

Health officials anticipate that continued high immunisation coverage and intensified surveillance to detect and respond to possible measles outbreaks would see indigenous measles eliminated by the 1995 target date. The programme was initiated at a 1988 Caricom health ministers' meeting in Barbados, and followed the English-speaking Caribbean's success in eliminating smallpox and poliomyelitis and by 1988, reducing diphtheria, whooping cough and tetanus in an Expanded Programme on Immunisation (EPI) launched in 1977.

Officials reported at the launching that some countries, Barbados among them, have already started their immunisation campaigns, while others are conducting training programmes for health personnel who will be involved in the exercise. Officials emphasised the importance of cooperation by the community if the elimination drive, budgeted at U.S. \$13 million dollars, is to be successful. Regional governments are meeting 12 million dollars of the expenditure.

Regional artistes, including storyteller Paul Keens-Douglas who was present, are joining the communications effort to help win community support. Posters, stickers, a comic strip, and radio and television promotions are being produced to inform the public and encourage appropriate action to "make measles history."

As recently as 1982, there were 8.89 reported cases of measles in the Caribbean, but this was reduced to 1.546 in 1988, when immunisation coverage of children in the target age group was 71 percent, according to Unicef data. The disease continues to surface, with outbreaks such as last year's when cases surged over the 4,000 mark and there were several deaths.

PAHO Caribbean programme coordinator Dr. Haimond Dyer told the launching the measles elimination drive is designed to "break the chain of transmission simultaneously in all the countries." The Caribbean's success in the EPI indicates that it is well-placed to create a world first with the elimination of measles, he suggested.

"We felt that the Caribbean could demonstrate to the world that it is possible to eliminate measles," he added.

**Cholera Reports for 12-24 April***P42704030691 Bogota Radio Cadena Nacional  
in Spanish at 1200 GMT 12 Apr 91*

[Editorial Report] The following is a compilation of reports on cholera cases and related information in Colombia and Ecuador between 12 and 24 April.

**COLOMBIA**

Bogota Radio Cadena Nacional in Spanish at 1200 GMT on 12 April in a one-minute report, states that the number of cholera cases continues to increase in the southern part of the country. It adds that "the National Disaster Prevention and Attention Office has officially reported 19 new cholera cases in Salahonda and Tumaco. Thus, there are now a total of 67 people afflicted with cholera in the country."

Bogota EL NUEVO SIGLO in Spanish on 19 April in a 200-word report on page 7 reports that "the National Health Institute [INS] confirmed on 18 April that laboratory tests had determined that 134 patients, out of a possible 321 in the country, had cholera." The report adds that "Colombian Health Minister Camilo Gonzalez Posso will travel to Bolivia on 19 April to preside over a meeting of regional health ministers and officials who will determine preventive measures and present a joint request for international aid."

Bogota EL TIEMPO in Spanish on 23 April publishes a 500-word on pages 1A and 8A a report on the arrival of a commission of French scientists and epidemiologists to help Health Ministry and INS officials in their battle against the cholera epidemic. The report adds that "the Paris Public Assistance representatives are Andre Dodin, a specialist in cholera from the Pasteur Institute, and Oliver Weil and Cristina Romana. The French scientists will meet with Health Minister Camilo Gonzalez Posso and INS Director Antonio Iglesias Camarra on 23 April" and visit the Bogota, Cali, and Medellin health facilities in the days to come. The French commission will leave on 4 May.

The same report also indicates that "the last Colombian INS report confirms the appearance of 17 new cases, 16

in Tumaco, and one in Tulcan, Ecuador. The INS has received a total of 379 laboratory samples—166 have been positive, 209 negative, and one is pending" [figures as published]

Paris AFP in Spanish at 2322 GMT on 24 April in a 250-word report, states that "health authorities confirmed today that the total number of people afflicted with cholera in Colombia has increased to 176 as another 10 cases have been confirmed in the southeastern Pacific coast region." The new cases of cholera include six residents of Tumaco, two of Salahonda, and two of El Charco.

#### ECUADOR

Hamburg DPA in Spanish at 1832 GMT on 18 April in a 350-word report notes Health Minister Plutarco Naranjo's statements on the advance of the cholera epidemic in the country. He said that after seven weeks of the cholera epidemic in Ecuador there are "approximately 3,500 cases, including proven and probable cases, and 59 people have died." He added that 9 out of 21 provinces have been afflicted with the disease and that the "figures cause concern, but are not alarming." The minister used the term "outbreak" to describe the situation, since "3,500 cases in a population of 10 million is not an epidemic." He stated that the number of cholera cases in Ecuador "that have been proven beyond any doubt total 635."

#### Health Ministers Meet in Bolivia, Discuss Cholera

PY2304141091 La Paz Television Boliviana Network in Spanish (0200 GMT 23 Apr 91)

[Text] The meeting of health ministers in Sucre was attended by representatives from Bolivia, Colombia, Peru, Venezuela, Cuba, Ecuador, and Spain. During their meetings the ministers established mechanisms for the fight against cholera and created an emergency committee that will work in Lima on reports of progress against the cholera problem. The committee will present its findings at the next meeting, which will be held in Caracas.

The delegation of ministers today visited President Paz Zamora at Government Palace to fill him in on the results of the meeting. Bolivian Health Minister Mario Paz Zamora was in charge of introducing the ministers to the president of the Republic. [Begin Minister Paz Zamora recording]

**Health Minister Paz Zamora:** I have come here to introduce the health ministers of the Andean region who have worked with us and the chairmen of the Bolivian Institutes of Social Security, as our beloved brothers. The work that has been done is very important within the framework of the [words indistinct] Andean region health ministers. We have come here to greet you and to report on the most important agreements we have reached. [end recording]

Colombian Health Minister Camilo Gonzalez was appointed the committee's representative before the president of the Republic. [Begin Gonzalez recording]

**Health Minister Gonzalez:** I have been given the honor of speaking on behalf of all other ministers. I was asked to convey the greetings of the countries that were founded by Simon Bolivar and those of the ministers who are working together to overcome the difficulties in our countries' health sector.

Our major problems are of a social nature and, although they cause several difficulties, they also lead to several benefits. Each one of our meetings has been [words indistinct]. The principles of liberty, fraternity, and equality have been applied to the health and social security areas and to the defense of the rights of people. Therefore, we believe that the slogan of the new democracy will be solidarity, universality, and equality. This is our message [word indistinct]. [end recording]

President Paz Zamora emphasized the importance of the Sucre meeting of ministers from the social security and health sectors. [Begin President Paz Zamora recording]

**President Paz Zamora:** Our objectives have been fully complied with, and I believe that we have succeeded in leaving behind formality and the obligation to attend meetings just to comply with our duties. Based on what I have heard from you, I believe that during the meetings the ministers actually discussed the basic and important realities of our region.

I thank you for the privilege of being the first president of the Andean region to hear directly from you about the results of the meetings in Sucre. I will report on these results to my Venezuelan counterpart and to those who will attend the meeting to be held in Caracas. I am sure that the Caracas meeting will be a success, mostly because it will be based on what has been achieved here. The topics discussed during the Sucre meetings concern not only the health ministers of the region but also the governments. We must now implement the measures—about which you are so well-informed—which are related to economic adjustments and the rationality and competitiveness of our economies, because the international market is increasingly demanding and competitive for countries such as ours.

We must also find a way of combining the efforts of achieving a more rational and effective economy without being unfair to people in general and especially to the inhabitants of our region. We must be fair in meeting our peoples' needs in the fields of health and future prospects.

I must tell you that these needs are not always perceived clearly. These challenges must be clearly and favorably met. They must be met from a strictly humanitarian and social point of view, as the Colombian minister said. To our concern over the inhabitants of our region and countries we must add our concern over the rationality and productivity that are required from those who live in an extremely competitive world. To talk about health is



to talk about the human resources of a country. The more human resources a country has, the more competitive it will be in the economic and other fields. [end recording]

#### **Andean Pact Countries Create Anticholera Fund**

PY2404141291 Lima RTP Television Network  
in Spanish 1100 GMT 24 Apr 91

[Text] The Andean Pact countries have decided to create a common fund to fight the cholera epidemics. This information was released by Health Minister Victor Yamamoto, who attended a meeting of Andean Pact health ministers in Bolivia.

In a statement to the press, the minister also referred to the health workers' strike. [Begin recording]

**Yamamoto:** The 15th meeting of Andean Pact health ministers arrived at very positive conclusions. One of them is to create a fund...[changes pattern] a common front of ministers of the Andean region which is now being affected by the cholera epidemics.

The creation of a common front will give stronger backing to our requests to international agencies.

**Reporter:** How much will be earmarked for this fund?

**Second reporter:** What will be the international economic aid for....?

**Yamamoto:** No decision has yet been made. As of 25 April, Andean Pact countries will create commissions to design the proposals that will be raised at a meeting of the Andean Pact presidents that will be held in Caracas between 17 and 19 [no month given]. [end recording]

### **BOLIVIA**

#### **Yellow Fever Outbreak Reported in Santa Cruz**

PY0904172891 La Paz Radio Fides in Spanish  
1100 GMT 9 Apr 91

[Text] Some 39 cases of yellow fever, 25 of which were fatal, have been detected in Santa Cruz de la Sierra. A Health Ministry commission is scheduled to arrive in Santa Cruz today to bolster control measures.

### **BRAZIL**

#### **Mosquito-Borne Disease Reappears in Rondonia**

PY1204022491 Rio de Janeiro Rede Globo Television  
in Portuguese 2300 GMT 11 Apr 91

[Text] A disease that was thought to have been eradicated is attacking again in Rondonia. It is Oropoxi fever, transmitted by mosquito. The symptoms are similar to those of cholera and of meningitis. Some 40,000 people have already been affected by this disease. A state of public disaster was declared in Ouro Preto do Oeste after the first fatal cases.

The headache caused by that disease is similar to that caused by meningitis; the indisposition is the same as that caused by dengue, and it is always accompanied by

high fever and muscle aches, as in the case of malaria. But it is neither malaria, dengue, or meningitis. This disease which is already epidemic in the central region is known by the name Oropoxi. It is caused by a virus which was unknown until recently. The virus is transmitted by the mosquito maruim, which is common throughout the Amazon region.

Over the past few weeks, at least 40,000 inhabitants of Ouro Preto do Oeste have contracted this disease. The local hospital, which has only 36 beds, is receiving more than 86 patients daily. Even the corridors are being used because there is no more space in the rooms for anyone, not even on the floor.

Unofficial surveys show that 10 people who had malaria and oropoxi at the same time have already died in Ouro Preto do Oeste. The most serious problem is that no specific medicine to fight this disease has yet been developed. Treatment so far is made based on intravenous fluids and muscle relaxants. But the demand is so great that there is shortage of medicine, and the mayor has no more money to continue buying intravenous fluids.

#### **Endemic Disease Incidence Rising Nationwide**

91WE0292A Brasilia CORREIO BRAZILIENSE  
in Portuguese 10 Mar 91 p 10

[Report by Angela Oliveira]

[Text] The battle against endemic diseases is part of the Ministry of Health program that is supposed to be carried out by the end of this administration's term. However, the incidence of illnesses such as dengue [breakbone] fever, malaria, Chagas disease, and leptospirosis is not diminishing; instead it is rising throughout Brazil. In the opinion of Rio de Janeiro deputy, and sanitation expert, Sergio Arouca of the PCB [Brazilian Communist Party], what is needed is a public health model that can bring about an improvement in the living conditions of the average Brazilian. Arouca adds that if no measures are forthcoming to improve the system in Brazil, the World Health Organization (WHO) project entitled "Health for All"—under which the member states of that body, including Brazil, committed themselves to assure better living conditions by the end of the century—will be thwarted and all countries will experience only epidemics.

Arouca, who was president of the Oswaldo Cruz Foundation (FIOCRUZ) at the same time as he was secretary of health for Rio de Janeiro State, emphasizes that investment is the best way to combat epidemics—investment not only in health, but in education, sanitation, better wages, the environment, housing, and proper nutrition. He adds that by putting all those factors together, i.e., attacking causes rather than effects, is the way that government will succeed in eradicating the illnesses that are devastating the Brazilian people.

The health sector, according to Arouca, is experiencing one of the most severe crises ever. Things were worse

only during the period of the dictatorship, when investments in that field were prohibited and Brazilian researchers were stripped of their political rights and expelled from the country.

For example, Luiz Hildebrando, one of FIOCRUZ's best researchers during the 1970's, lost his political rights twice and is now one of the renowned scientists at the Pasteur Institute in France, where he is working on an anti-malaria vaccine, Arouca points out. The Mangueiros laboratory in Sao Paulo, he recalls, was destroyed in 1971. Its best researchers were persecuted and forced into early retirement.

The implementation of programs to prevent major outbreaks of endemic diseases is hampered even more in areas where the basic sanitation infrastructure is precarious. Arouca particularly mentioned the Northeast, where about 60 percent of the population has neither

running water nor sewers. He noted that the failure to develop a solution for the rural areas means that every year a sizeable contingent of people moves into the urban area, swelling the number of shantytowns in the cities.

#### Measles Kills 2,000 Annually

Illnesses that can be prevented by immunization also continue to afflict thousands of Brazilian children. Measles, for example, strikes about 54,000 children a year, and causes the death of about 2,000. More than a thousand cases of diphtheria are recorded every year, with 200 deaths. According to Minister of Health Alceu Guerra, measles vaccination campaigns in 1990 attained coverage of more than 90 percent. Deputy Arouca disputes that figure, saying that not even in the more developed states of Southern Brazil did coverage reach 55 percent.

Panorama of Diseases in Brazil

Disease	Cases	Deaths
Malaria	About 600,000 cases per year among residents of Amazonia	About 3,000 in that region
Chagas	About 5 million Brazilians are infected	2,000 per year
Schistosomiasis	About 5 million people in the Northeast and Southeast are infected	Approximately 670 deaths in 1987
Leptospirosis	2,500 cases detected in 1989	10 percent death rate
Filariasis	About 2,800 cases per year	
Dengue	Epidemics have broken out in recent years. In 1986 about 500,000 cases were recorded in Brazil	Insignificant number of deaths
Leishmaniasis (Tegumental American)	24,000 cases recorded in 1988, increasing during the past 10 years	

Source: National Health Foundation - Ministry of Health

According to Ministry of Health data, Brazil obtained better vaccination results in 1990 than at any time in the past 10 years, and achieved the goal recommended by the World Health Organization of immunizing at least 80 percent of Brazil's children against polio, measles, and tuberculosis. The ministry expects that coverage of the DPT vaccine (against diphtheria, tetanus, and whooping cough) will also reach 80 percent.

#### Leptospirosis Outbreaks in Rio, Sao Paulo

PY1704143091 Brasilia Radio Nacional da Amazonia Network in Portuguese 1000 GMT on 17 Apr 90

[Editorial Report] Brasilia Radio Nacional da Amazonia Network on 17 April carries a one-minute report on an outbreak of leptospirosis in Barra Mansa, Rio de Janeiro. According to the report, a total of 34 cases have been reported and three people have died from the disease in the past five days. The number of cases in Volta Redonda increased to seven in the last 48 hours, the report states.

Sao Paulo O ESTADO DE SAO PAULO in Portuguese on 16 April carries on page 11 a 350-word item reporting

that, according to the Epidemic Vigilance Service, 518 cases of leptospirosis have been reported in greater Sao Paulo in the first two weeks of April, resulting in 36 deaths.

#### Cholera Near Brazilian Border Raises Fears of Spread

PY1104180391 Madrid EFE in English 1521 GMT 11 Apr 91

[Text] Brasilia, April 11 (EFE)—Fears that Brazil will be the next Latin American country to be hit by the deadly cholera epidemic sweeping the Andes were fueled Thursday [11 April] when officials confirmed a case in a Colombian town just across the border from Brazil. A fisherman was found to be suffering from the disease in Leticia, which is close to the northwestern Brazilian town of Tabatinga. The man, a Peruvian, first showed symptoms of the disease while out fishing on part of the River Solimoes which flows between the two border towns, officials said.

Health officials fear that the disease, first prevalent on the Pacific Coast, is now sweeping through the interior

along the complex network of rivers and tributaries which cover the Amazon Basin. Brazilian health workers are on stand-by alert for cholera symptoms, and the hospital in Tabatinga has stockpiled seven tonnes of drugs to deal with an epidemic, according to the town's mayor.

Brazilian Health Ministry officials are on the lookout for Peruvians travelling along the rivers of the Amazon Basin who might be carrying the disease. Recent estimates suggest that one Peruvian in every 10 is a cholera carrier. More than 130,000 cases of the disease and almost 1,000 deaths have been reported in Peru since the first outbreak at the end of January, according to government figures. Other cases have been discovered in neighboring Ecuador and Colombia.

The cholera bacteria, potentially deadly but treatable, is spread by sewage-infected drinking water in poverty-stricken areas, and by contamination of the raw fish dishes popular in the region.

#### **First Cholera Case Confirmed in Northwest Border Town**

*PY1904025491 Rio de Janeiro Rede Globo Television in Portuguese 2300 GMT 18 Apr 91*

[Excerpt] Cholera has arrived in Brazil. The first case was confirmed today by the Health Ministry. A man with cholera has been hospitalized in Tabatinga, Amazonas, on the border with Colombia. [passage omitted]

#### **Fourth Cholera Case Confirmed on Colombian Border**

*PY241131491 Brasilia Radio Nacional da Amazonia Network in Portuguese 1000 GMT 24 Apr 91*

[Excerpt] The Health Ministry has confirmed the fourth cholera case in Brazil. So far, eight cases have been confirmed in the High Solimoes Region. Four cases have been registered in the Colombian town of Leticia and four in Brazil.

This is the first confirmed case of cholera among the Indian population. The patient is a 19-year-old man of the Ticuna tribe. He lives at the Indian Community of Belem of Solimoes, Tabatinga County. According to Baudur Shubert, secretary of the National Committee for Cholera Prevention, 20,000 Ticuna Indians live in the Amazon Region. He explained that the Health Ministry is adopting measures to prevent the spread of cholera among the Indian communities. [passage omitted]

### **CHILE**

#### **Cholera Case in Conchalí; Measures Adopted**

*PY1704033091 Santiago Radio Cooperativa Network in Spanish 2300 GMT 16 Apr 91*

[Excerpt] The Health Ministry has banned the sale of food prepared with raw fish, raw seafood, or raw vegetables in light of the first case of cholera detected in Chile since 1890.

The measures were disclosed by Health Under Secretary Patricio Silva after it was confirmed that a 58-year-old construction worker living in Conchalí had contracted cholera.

The official reported that there is currently strict control of the water system and, in light of this, water is safe for consumption. Silva added that the people will be properly informed of any abnormal situation in this regard. [passage omitted]

#### **Health Official Confirms Second Cholera Case**

*PY1804191291 Santiago Television Nacional de Chile Network in Spanish 0000 GMT 18 Apr 91*

[Summary] Health Under Secretary Patricio Silva has confirmed a second case of cholera in the country. Silva also said that two other persons are currently being closely watched and diagnosed.

#### **First Cholera Fatality Registered**

*PY2304231291 Madrid EFE in English 1726 GMT 23 Apr 91*

[Text] Santiago, April 23 (EFE)—The cholera epidemic sweeping Latin America has claimed its first life in Chile where an elderly woman died of the disease Tuesday [23 April], Deputy Health Minister Patricio Silva said. The 86-year-old woman was one of the 22 cases confirmed in Chile, mainly in the capital, during the last week, Silva said.

The epidemic began in Peru, where more than 1,000 people have died, but has since spread to Ecuador, Colombia, Brazil and Chile. The bacteria is spread through sewage-infected food and drinking water and can cause death within hours if left untreated.

The London-based Latin American Weekly Report said Tuesday that up to one million Latin Americans could become infected by the disease within the next three or four months.

#### **Health Minister Reports 32 Cholera Cases**

*PY2804035291 Santiago Television Nacional de Chile Network in Spanish 0000 GMT 28 Apr 91*

[Excerpt] Health Minister Jorge Jimenez made an assessment of the situation 11 days after the cholera outbreak in Chile. He also expressed optimism about halting the spread of the disease. [Begin Jimenez recording]

**Jimenez:** The spread of the disease has been moderate. Up to now, a total of 32 cholera cases have been reported. This is a very low figure for a city of 5 million inhabitants like Santiago. [end recording]

He said there is an indication that the cholera outbreak is disappearing in view of the cold weather, among other reasons. Nevertheless, he stressed the importance of implementing prevention measures to avoid a new cholera outbreak. [passage omitted]

## COLOMBIA

### Authorities Report 81 Cholera Cases Along Pacific Coast

PA11404142591 Bogota Radio Cadena Nacional in Spanish 1200 GMT 13 Apr 91

[Text] The Health Institute confirmed today there were 14 new cases of cholera in Tumaco Port and the town of Salahonda, on the Pacific Coast, raising to 81 the number of cases reported so far in the country. There have been no deaths, however. Most of the patients have been cared for at the San Andres Hospital in Tumaco, the Pacific Coast's second most important port.

## ECUADOR

### Doctors Declare Health Emergency Due to Cholera

PA1604131491 Hamburg DPA in Spanish 1623 GMT 15 Apr 91

[Text] Quito, 15 April (DPA)—The Medical Federation today unilaterally declared a health emergency in Ecuador because of the cholera epidemic that was detected in early March, which the government continues to describe as an "outbreak," claiming that it is "totally under control."

According to the doctors "things are getting out of hand" and they consider the adoption of "true emergency" measures "urgent and essential" to stop the spread of this disease, now reportedly totalling nearly 5,000 cases resulting in approximately 50 deaths.

The government, which has acknowledged nearly 300 cases and 24 deaths, considers it "unnecessary" to declare a national emergency and has described the reports on the magnitude of the problem "exaggerated and out of proportion."

However, several provincial governors are in favor of the emergency, which would release budget resources to fight the epidemic which, since it first appeared in Peru, has been rapidly spreading throughout South America.

Simultaneously, Italo Barragan, WHO representative in Ecuador, has described the measures adopted by the government to fight the spread of cholera as "correct." He said that "the measures taken were those recommended by WHO," and that according to his figures, the number of cases recorded in Ecuador is 1,200. He added that these "would have risen to at least 12,000 if the correct measures had not been taken."

Meanwhile, the epidemic has spread rapidly in Ecuador. Since it first appeared along the Pacific Ocean coast in regions that border Peru, the cholera epidemic has reached the Andes and the Amazon jungle. Unconfirmed reports refer to new cases detected every day with an ever-increasing number of victims, especially among the poorer sectors of the population.

### Authorities Acknowledge 682 Cholera Cases

PA2104191291 Madrid EFE in Spanish 0120 GMT 16 Apr 91

[Text] Quito, 15 Apr (EFE)—Ecuadoran Deputy Health Minister Enrique Granizo today acknowledged that the number of confirmed cholera cases in the country is 682. At the same time, he argued that the number of likely cases of cholera is 2,488 and not 5,000, as reported by the Medical Federation.

Granizo noted that there have been 59 fatalities since the epidemic broke out at the end of February in La Puntilla and Bajo- Alto towns, on the border with Peru.

The deputy health minister also noted that only the president of the Republic has the authority to declare a nationwide medical state of emergency; he recalled that medical emergency has already been imposed in the Guayas, El Oro, and Loja provinces, which are the most affected by the epidemic.

Granizo also pointed out that the emergency declared by the Medical Federation last week is positive as it reflects this sector's commitment to participate in the fight against cholera.

The Ecuadoran medical doctors' initiative was taken in the wake of President Rodrigo Borja's statements that emergency declarations do not resolve the problem. Borja flatly rejected the Pan-American Health Organization and the United Nations Children's Fund's (UNICEF) request that a state of emergency be declared.

## GUYANA

### Health Officials Issue Cholera Advisory

FL2304202091 Bridgetown CANA in English 1940 GMT 23 Apr 91

[Text] Georgetown, Guyana, April 23, CANA—With cholera deaths rising in Latin America, Guyana's health authorities have been giving advice on how to avoid the disease. The ministry of health has told Guyanese to wash their hands regularly, and avoid eating uncooked or undercooked foods and drinking untreated water.

The government also said it was setting up an advisory committee to promote public awareness of the deadly disease. In a statement, the health ministry said port health and immigration officials had been briefed on the symptoms of the disease.

Peru, Brazil, Chile, Mexico and the United States have reported cases of cholera. More than 900 deaths have been reported in Peru. Director of the Panamerican Health Organisation (PHO), Carlyle Guerra de Macedo, said up to six million people in Latin America could eventually be infected by the virus, which causes diarrhea and rapid dehydration, because of poor hygienic conditions, and as many as 42,000 could die.

## PANAMA

### Customs Seizes Fish Shipment Infected With Cholera

PA3004025791 Panama City ACAN in Spanish  
0147 GMT 30 Apr 91

[Text] Panama City, 29 Apr (ACAN - EFE)—A ship that came from South America, which was turned back in Costa Rica, was seized in Panama, where it docked 3 days ago, because its cargo of fish was infected with cholera, Customs Director Rodrigo Arosemena announced today.

In remarks to ACAN - EFE, Arosemena voiced concern over the "grave" situation that has arisen, because he was informed that part of the fish shipment was unloaded and delivered to a processing company in Vacamonte port, on the Pacific Ocean.

There also is concern that some crew member may be infected with the disease, something which will be investigated tomorrow, and this increases the danger that a "terrible" epidemic may spread in Panama, he noted.

The official said the name of the ship is "Sao Pedro," and that its captain, whom he did not identify, is staying at a Panama City hotel. Tomorrow, the authorities will summon the captain to question him on the matter.

Arosemena said Health Minister Guillermo Rolla Pimentel confirmed to him the laboratory tests on the shipment were "positive." For that reason, he ordered that the shipment be held in Vacamonte so that the fish that is in the warehouse can be destroyed.

The customs chief said he did not know what country registered the ship or if the fish came from Peru or Chile, as a Panamanian television station has reported.

The ship had been resupplied with fuel and was ready to leave when it was detained, Arosemena explained, stressing "we stopped it in time because the load that is still in the ship's warehouse could have been dumped into the sea."

On several occasions, Minister Rolla Pimentel has told the press that cholera may reach the country at any time, but so far no case has been detected.

## PERU

### Cholera Dead Total 911 of 131,527 Cases

PY0804173591 Lima RTP Television Network  
in Spanish 0100 GMT 7 Apr 91

[Text] The Health Ministry today released a press note stating that the number of fatal cholera cases already totals 911, that 48,003 people have been hospitalized, and that the number of cholera cases registered in the country totals 131,527.

In Lima and Callao alone 143 people have died, 14,696 have been hospitalized, and the number of registered cases totals 49,017.

### Bolivia, Ecuador Lift Bans on Peruvian Food Exports

PY1304192091 Madrid EFE in English 0755 GMT  
13 Apr 91

[Text] Lima, April 13 (EFE)—Bolivia and Ecuador have lifted bans on imported Peruvian food imposed after the recent cholera outbreak that has killed 987 people to date in Peru and has also been blamed for deaths in neighboring Ecuador.

Peruvian Prime Minister Carlos Torres called the lifting of the ban "great news" and said hundreds of trucks detained at the border crossing points had been allowed to pass. Estimates had suggested the cholera epidemic could cost Peru's faltering economy as much as 500 million dollars in lost revenue from tourism and sales of fish, fruit and vegetables.

Meanwhile, a Peruvian Health Ministry official said that in addition to almost 1,000 deaths reported, the epidemic had infected 142,000 people and put 52,000 into hospital.

Colombian officials on Friday said 14 new cases of the disease had been reported in the Pacific port of Tamuco, located 700 km southwest of Bogota. More than 80 cases of cholera have been reported in Colombia although none to date has proved fatal.

Ecuadorean officials said Friday [12 April] the number of cases there had increased to 480 with six deaths reported. But the health officials said it would be premature to declare a national state of health emergency because that could spread undue alarm, hurting tourism and exports.

Health officials say poor sewage treatment in areas where the disease is spreading has allowed the cholera bacteria to infect the drinking water and fish caught near the coast.

### Health Ministry Reports 1,043 Dead in Cholera Epidemic

PY1904015091 Madrid EFE in Spanish 1928 GMT  
17 Apr 91

[Excerpt] Lima, 17 Apr (EFE)—The Peruvian Health Ministry reported today that as a result of the cholera epidemic that has affected the country for two and a half months, 1,043 people have died and 145,422 people have the disease; of this number, 54,000 people are in hospitals.

According to the report, the mortality rate in hospitals is 1.9 percent and the number of people with the disease shows that the epidemic has not lessened.

Antonio Felices, a Health Ministry epidemiologist, said that 75 percent of the Peruvian population of 22 million inhabitants have the cholera bacillus although they may not exhibit any symptoms.



It is believed that the recent drop in temperature will help lower the number of cholera cases. A drop has already been observed in some hospitals, although not in the Port of Callao.

It has been reported that in Callao, because the Carrion hospital is no longer capable of treating its patients, many of those with cholera will be transferred to the Social Security hospital, which is treating them even though they may not be associated with that security system.

The Health Ministry has reported that although there has been a drop in the number of cholera patients in some hospitals, this does not mean the disease is declining. [passage omitted]

#### **Registered Cholera Cases Reported at 258,000**

PY2004210491 Lima Radio Nacional del Peru  
Pachacutec Network in Spanish 1200 GMT 20 Apr 91

[Summary] Carlay Guerra de Macedo, director of the Pan- American Health Organization, has reported that 258,000 cholera cases have already been registered in Peru and that the number of fatalities has increased to 1,140.

#### **Government Commission Reports 1,249 Cholera Deaths**

PY2904034691 Madrid EFE in English 0232 GMT  
29 Apr 91

[Text] Lima, April 28 (EFE)—The three-month-old cholera epidemic has killed 1,249 people in Peru, and more than 171,000 others have contracted the disease, according to the latest figures released Sunday [28 April] by a government health commission. The commission, set up to combat the growing epidemic, said that as of last Friday, 64,925 people had been hospitalized with the illness, which causes severe diarrhea and vomiting.

A spokesman for the commission said the disease seemed to propagate more quickly over weekends, apparently because people tend to let their guard down against contaminated foods.

Peruvian Health Minister Victor Yamamoto said this week that while the spread of cholera seemed to be falling off in the coastal and mountain regions, there was concern of a new outbreak in the eastern Amazonian area.

The cholera bacteria is spread through sewage which gets into water sources for drinking, fishing and crop irrigation. Cases of cholera have recently been registered in Colombia, Ecuador, Chile and Brazil, which all border Peru where the disease first appeared in late January.

## ALGERIA

### Thenia Experiences Typhoid Epidemic

LD2904041191 *Algiers Domestic Service in Arabic*  
1830 GMT 28 Apr 91

[Excerpt] For several days, cases of a typhoid epidemic appeared and began to spread in the Thenia area of Boumerdes Province. To discover the causes of this epidemic and its development, our colleague, Souad Abdelli, called on the Health Ministry, where she interviewed Dr. Ouahdi, the epidemic specialist at the Directorate for preventing Epidemics: [Begin Ouahdi recording]

The reasons behind the spread of typhoid at Thenia go back to March 1991, when sewage pipes suffered some trouble and breakage. The sewage water mixed with the drinking water at a reservoir close to Bougharrab and Andou quarters. This is the main reason for the epidemic we are now witnessing. There are now 256 cases in the hospital, including 131 bacteriologically certified cases. There are cases too that were taken to Elkattar Hospital—these number 24 cases. It is worth mentioning that not one single death was reported. Second, the other thing worth mentioning is that Thenia has had a great deal of work done on the sewage and drinking water which was started in 1987 and continued for all these long years, and this led to this epidemic. It is worth mentioning too that there is some slackening in these works. [passage omitted] [end recording]

## BANGLADESH

### Over 430 Die Due to Diarrhea in North, South Districts

BK2204170491 *Dhaka Domestic Service in English*  
1530 GMT 22 Apr 91

[Text] The health and family welfare minister, Chowdhury Kamal Ibne Yusuf, made a statement in parliament this evening on the incidents of diarrhea in several southern and northern districts in the country. The statement was given in accordance with the commitment by the deputy leader of the house during the disposal of a call attention notice yesterday. The health and family welfare minister informed the house that 1,016 medical teams are working in 15 affected districts. He said 430 people have so far died in these areas where over 27,200 have been attacked with diarrhea. Adequate quantities of medicines have been sent and preventive measures taken in all affected districts, he added.

### Diarrhea Kills 600; Army Joins Medical Efforts

BK2404105091 *Hong Kong AFP in English* 0807 GMT  
24 Apr 91

[Text] Dhaka, April 24 (AFP)—At least 600 people have died and thousands are suffering from diarrhoea contracted in Bangladesh during the past three months, officials said Wednesday as the army joined medical efforts to curb the water-borne disease.

They said the epidemic of the debilitating and dehydrating disease was spreading fast and had now gripped 24 of Bangladesh's 64 administrative districts, mostly on the coastal belt.

The highest number of deaths, 93 so far, had been recorded in Barisal, local officials said by telephone.

Prime Minister Begum Khaleda Zia, who flew to some of the affected coastal areas, ordered intensified medical treatment for the patients and sought help from non-governmental organisations.

Officials in several districts said there was a shortage of medicine, but were hopeful of government measures.

On Monday Health and Family Welfare Minister Chowdhury Kamal Ibne Yusuf said in parliament that more than 27,000 people had contracted the diarrhoea and 430 had died since January.

Lack of clean drinking water during the current dry season has been identified as the major cause for the spread of the disease.

State-run television and radio has started appealing to people to drink water boiled or use purifying tablets, and to use proper toilets instead of canals or ponds.

## EGYPT

### Sixty Percent of Egyptians Bilharzia Carriers

91WE02594 *Cairo AL-WAFD in Arabic* 4 Mar 91 p 3

[Article by Mahmud Shakir]

[Text] The Higher Council for Universities has decided to allocate \$1 million for the national project for liver treatment. The plan is to be implemented within the framework of a project linking Egyptian and American universities. Senior specialist teaching at Cairo University and the universities of 'Ayn Shams, Tanta, al-Mansurah, and al-Zaqaziq are to participate in the project's scientific research. Research has shown that the percentage of liver bilharzia cases in Egypt has reached 60 percent of the population, especially in the countryside. The percentage of carriers of the virus of infectious hepatitis B in Egypt is now 400 times that of Austria. Also, the number of cases of cirrhosis of the liver has reached between one hundred and seven hundred times that of most of the world countries. The percentage of those suffering from esophageal bleeding in Egypt has reached 9 percent of the population, compared to no more than 2 percent in the United States and Britain and 1 percent in Australia. Egypt has gone from being a region of moderate infection to that of heavy infection. Infectious hepatitis B is foremost among the causes of liver cancer in Egypt. The scientific research indicates the need for conducting a scientific survey of liver diseases in every region in Egypt in order to draw up a comprehensive map showing the extent of the spread of liver diseases.

Scientists are currently focusing on providing immunization, since treatment after becoming infected by the

disease is currently unavailable. Immunization serums are still very expensive and beyond the reach of patients, even those with high income. The Ministry of Health had announced that in the future it is going to be possible to produce this immunization serum in Egypt. Specialists believe that production of serums in Egypt would require advanced technology which it does not have at present. It would also require the establishment of an expensive plant that would cost \$1 billion.

A study prepared by Dr. Muhammad al-'Aqqad, a surgery instructor at the college of medicine at Al-Zaqaziq University, said that the liver is one of the most important organs of the body and is no less important than the brain and the heart. It is responsible for the assimilation of food nutrients. If the liver fails to function all body organs will be deprived of the energy they need. Moreover, the liver is a basic organ that neutralizes most toxic and harmful matters that enter the body whether in the form of medicines, contamination, or harmful secretions. The most common type of liver infection is hepatitis A and the second most common is hepatitis B, the latter being the most dangerous type because it causes chronic dangers and requires a liver transplant. It hits children and adults through the use of contaminated hypodermic needles or contaminated blood transfusions. Injection against hepatitis B infection is taken in three doses. The drug should be kept in a very cold temperature. The problem lies in the high cost of medicine. A study is underway in Egypt to manufacture a high quality serum at a reasonable cost and to establish centers specializing in liver treatment and surgery.

Scientists and specialists in liver diseases say that symptoms of infectious hepatitis B are similar to those of the common flu, such as high temperature, headache, loss of appetite, vomiting, and pain in the upper abdomen. Urine also turns dark in color, resembling tea, and yellow spots appear in the eyeball. No food should be taken outside the home, except in places that are certain to be clean. Vegetables and fruits should be washed. The disease is transmitted through contaminated food. The most dangerous type is the B type. A child can be infected by his mother during and after birth. Infection can also be transmitted by contaminated hypodermic needles. A survey of this disease would show that 10 percent of the patients suffering from infectious hepatitis B and those suffering from chronic liver diseases suffer from cirrhosis and cancer of the liver. Some 50 percent of those suffering from type X virus also suffer from cirrhosis and cancer of the liver.

Dr. Nabil Sayyid 'Attiyah of al-Humayyat hospital emphasizes the importance of the need for doctors to inform their patients. Some doctors use cortisone injections to treat patients. This is one of the most dangerous methods since it creates an imaginary cure for the patient, making all the symptoms disappear and creating the impression that the patient has fully recovered

## IRAN

### New Virus Threatens Kermanshah Province

91AS0812m London KEYHAN in Persian  
11 Apr 91 p 2

[Text] The spread of a virus in Kermanshah which has not been seen before in Iran and is being called a "hepatitis virus" is threatening the Province of Kermanshah as well as other parts of Iran. Dr. Mojtaba Rostami, a specialist in infectious disease at Kermanshah's Sina Hospital, says that so far 500 cases of this dangerous and fatal illness have been seen in that hospital.

The physician says: In view of the potable water in the city of Bakhteran (Kermanshah), which is at a high level, this illness has spread and is still spreading. This illness especially threatens pregnant women and fetuses.

Hospital officials in Kermanshah say that during one month 500 cases of this illness have been identified and if the potable water problem is not solved, there will be irreversible consequences.

### Minister Says Outside Aid for Refugees 'Very Insignificant'

LD140412991 Tehran Voice of the Islamic Republic of Iran First Program Network in Persian  
1030 GMT 14 Apr 91

[Text] Dr. Malekzadeh, the minister of health, treatment, and medical training, in an interview with the correspondents this morning, outlined the initiatives taken by that ministry to help the Iraqi refugees. While describing their health and hygiene conditions, he said: Until now, despite the shortage of the necessary equipment, 200,000 patients have been treated as outpatients, 6,400 patients have been admitted, and 1,500 major operations and 500 childbirths have been recorded. Also, so far 250 doctors and 500 health and hygiene specialists have been dispatched to the region. He further remarked on the dispatch of 120 ambulances, 250,000 cans of powdered milk, five tonnes of hygiene and disinfecting solutions, 200 tonnes of medicine, as well as 150,000 vaccinations given to the Iraqi refugees.

Dr. Malekzadeh added: These dear ones are in urgent need of aid, in particular, foreign aid which has been very insignificant so far. We expect the international and health organizations to give further assistance.

The minister of health, treatment, and medical training reenumerated the medical and hygiene needs of the refugees as medicine, vaccines, disinfectants, disposable medical equipment, and especially field hospitals. He named diarrhea, as the most widespread sickness in those parts and announced: Since the residents from northern Iraq were not inoculated, the possibility exists of the spread of some contagious disease among the children.

**ISRAEL****Health Ministry Denies Drinking Water Polluted**

TA2504111991 Tel Aviv YEDI'OT AHARONOT  
in Hebrew 25 Apr 91 p 9

[Report by Ora Namir and Nurit Arad]

[Text] The agriculture minister's adviser's warning that the water we drink is both contaminated and carcinogenic is inaccurate, the Health Ministry announced in reaction to the alarming reports.

The Health Ministry admitted that the subterranean water has grown a little more polluted, but drinking water is supplied exclusively from wells whose water is tested and is found to be clean and good.

"There is constant watch for germs or carcinogenic elements in the water," said the communique.

The Health Ministry firmly denied that information on the subject is being withheld.

**JORDAN****Over 300 Cases of Pulmonary Tuberculosis in 1990**

91P40207A Amman AL-DUSTUR in Arabic  
4 Mar 91 p 2

[Text] Amman—Dr. Khalid Abu-Raman, head of the Pulmonary Disease Department in the Ministry of

Health, stated that there were 301 cases of pulmonary tuberculosis in the Kingdom in 1990. Thirty-nine of these cases were epidemic, and 138 were recorded as nonpulmonary tuberculosis.

Dr. Abu-Raman told AL-DUSTUR that the infection rate for tuberculosis among first-grade elementary school students in Jordan is 0.5 percent, while the rate in some Mediterranean countries exceeds 7 percent. The ratio of incidents of tuberculosis per year is 14 cases for every 100,000 citizens, whereas in some other countries it is more than 300 cases for every 100,000 citizens.

Dr. Abu-Raman asserted that Jordan is one of the principal countries in the region leading the fight against tuberculosis. This is being accomplished by reliance on a comprehensive national program, which has at its disposal modern, scientific means used by 10 centers which are scattered throughout the various regions of the Kingdom. They provide modern, short-term treatment of citizens and the afflicted free of charge, despite the increase in its cost.

He also said that the ministry and pulmonary disease center staffs are undertaking volunteer, consciousness-raising campaigns against tuberculosis. They are also cleaning up the Kingdom's cities to prevent the spread of infectious tuberculosis to children under the age of six.

Dr. Abu-Raman made it clear that he expects news from the World Health Organization that Jordan is one of the principal countries in the Eastern Mediterranean region which will eliminate tuberculosis as a societal health problem before the year 2000.

## FRANCE

### First Lawsuit Filed on Behalf of DES Victim

91WE0303A Paris LE MONDE in French  
3 Apr 91 p 18

[Article by M.L.: "Distilbene on Trial"]

[Text] More than 20 years after cancer was first discovered in very young girls whose mothers had taken a synthetic hormone, diethylstilbestrol (DES), for the first time in France one of the victims has instituted legal action against the UCB laboratory that marketed the product under the brand name Distilbene.

The 23-year-old woman, forced to undergo a hysterectomy due to cancer, initiated the civil suit before the Nanterre Court in order to call attention to a matter the list of whose victims is far from complete. Epidemiologists estimate that in France alone, 80,000 female fetuses were exposed to the drug, thought at the time to prevent miscarriages.

Synthesized in the United States in 1938, diethylstilbestrol (DES) was marketed in France in 1948 and sold under different names, including Distilbene and Stilboestrol-Borne. It was thought to prevent miscarriages, although one American study on over 1,600 women demonstrated its ineffectiveness as early as 1953. While the first cancers attributable to DES were described in the United States in 1971, it was not until 1976 that recommendations for its use in preventing "repeated spontaneous abortions" disappeared from the Vidal dictionary and the contraindication for use in pregnant women was not mentioned in that reference until 1977. Since that time, Distilbene has been reserved for treating prostate cancer.

Born between 1950 and 1977, "female Distilbene babies" would exhibit a cancer risk on the order of 1/1,000. Between 1972 and 1988, some 20 cases were described in France in patients between the ages of 7 and 22. According to one survey done in 1984 by the National College of French Gynecologists and Obstetricians, an analysis of 110 pregnancies in 57 patients exposed to DES, other abnormalities are much more frequent: ectopic pregnancies (15 percent) and abortion during the first and second trimesters (42 percent). Abnormalities of the genitals and sterility are also more frequent among such women.

By calling attention to the risks of Distilbene, the proceedings instituted by Veronique should alert victims so they may seek essential medical followup. If this civil suit is successful, it could lead to many others.

## TURKEY

### No Epidemics Among Iraqi Refugees Sheltered in Turkey

TA3004071891 Ankara Domestic Service in Turkish  
2000 GMT 29 Apr 91

[Text] It has been announced that no cholera cases have been discovered among the refugees from northern Iraq being sheltered on Turkish soil. Speaking at a news conference held today in Diyarbakir, Ahmet Okcun, under secretary at the Turkish embassy in Baghdad, said that no epidemic diseases were evident among refugees living in various shelters.

He added that 500 refugees were resettled until Sunday in the camp established by the United States in Zakho, on the Iraqi side of the border.

Okcun concluded by saying that so far 17,487 tons of relief aid have been given to the Iraqi refugees, of which 15,434 tons were supplied by Turkey and the rest by foreign countries through the auspices of the Red Crescent organization. Okcun explained that 7,357 tons in aid were sent to Hakkari and the rest to Sirnak.

## UNITED KINGDOM

### Meningitis-Breeding Ticks Spread Through Country

91WE0082 London THE DAILY TELEGRAPH  
in English 29 Oct 90 p 7

[Article by Peter Pallot]

[Text] Ramblers who become ill after walking through countryside populated by sheep and deer may have been bitten by a disease-carrying tick which appears to have spread to all parts of rural Britain.

Dr. Howard Bird, the senior lecturer in rheumatology at the University of Leeds, warned walkers yesterday to be alert to the risk of Lyme disease, so called because it was first identified in Lyme, Connecticut, in 1975.

In its early stages the infection can be cleared up by antibiotics, but untreated it can go on to cause swelling of the joints and impair the functions of the heart and nervous system, possibly causing meningitis.

The first symptoms are a rash appearing days or weeks after the victim has been bitten by a tick carrying in its gut a super bacteria known as borrelia burgdorferi.

"I would have thought that 20 or 30 cases have been confirmed in Britain," said Dr. Bird.

"Most cases have been in the south of the country, but it is now known that the tick is sheep-borne and it stretches up the Pennines to the north of England where we have been looking out for it."

Deer on the Scottish moors have caused several cases, although dogs and other creatures can carry infected ticks. People can become infected by walking in long grass, bracken, scrub or woodland.



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